Canadian Arctic Expedition Records.

R. M. Anderson.

Vol. II

January 1, 1914 to May 31, 1914

1914.

CALENDAR FOR 1914

JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Canadian Arctic Expedition
Records.
Volume II.

January 1, 1914, to May 31, 1914.

Rudolph Martin Anderson.

The Geological Survey.
Ottawa, Canada.

2.

Station | Dist. Run | Miles | Time | Miles | Time | Remarks

1914.

Collinson Point, Alaska.

Meteorological Records. 8:00 a.m. 2:00 p.m. 8:00 p.m.

Jan. 1. (Thurs.) Fairly strong East wind. Snow drifting thickly along the ground in the afternoon. Wind moderated towards midnight. Variable in afternoon, but snowing and drifting at 8:00 p.m. from West.

8 a.m. East wind 15
2 p.m. SE 3 mi
8 p.m. W. 24 mi
Max. T. -15.5
Min. T. -27.

Wind.	Max.	Min.
E 15	-21.	-27.
SE 3	-15.5	-21.1
W. 24	-16.	-25.

Jan. 2. (Fri.) Clear. Calm. Cold. Light westerly breeze in the evening. The days are getting noticeably longer. Today was an unusually clear day and it was fairly light at 9:00 a.m. Skinned two of my left-over frozen specimens — two Black Brant and one King Eider.

Clear
Calm
Cold

Max.	Min.
-22.	-30
-28.	-34.5
-27.5	-31

M.T. -22°
-34.5

Chipman, Cox and O'Neill with the advice and assistance of Mr. Leffingwell built an open-roofed snow-house for an astronomical observatory, to take lunar occultations.

Wind.
S 2 mi
E. 5.
E b N. 13.

Arctic Fox — Fred caught a Fox in trap between house and creek. Fahnestock came over from his house.

Collinson Point, Alaska.

Jan. 3 (Sat.). Cloudy. Light East wind. -18°-28.2

Cloudy a.m. Light East wind. Rahmens returned to his cabin. Skinned out Arctic Fox for specimen and Johansen skinned another. Wind. E6, E7, E4.

Max.	Min.
-21.5	-28.2
-18.	-22.
-18.	-23.7

Jan. 4 (Sun.). -13°5. -27°.

Cloudy and overcast all day. Snowing in evening. Wind E5, E13, E5. Skinned some frozen specimens (Phalarope and one Snow Bunting.

Max.	Min.
-15	-27
-13.	-15
-13.	-13.

Jan. 5 (Mon.). -11.5 -16°

Wind. W.18. N.0 E1. Cloudy. Wind from East in evening. Snow drifting a bit. Large ring around moon. Skinned a few small specimens.

Max. -11.° -13°-12°. Min. -14°-16°-16°.

Jan. 6 (Tues.). -12°. -22.5

Clear all day. Wind E 18.5. E21. E9. Cloudy. Strong East blizzard wind 38 miles per hour and snow drifting thickly late in evening.

Tomorrow night five or six large stars will be occulted by moon. Jeffrey will says the first time such an opportunity for occultations has happened in the six years he has been here.

Max.	Min.
-12	-20.5
-20.5	-22.5
-22.5	-22.5

Collinson Point, Alaska.

Jan. 7. (Wed.) Cloudy. East blizzard. Snow drifting very thickly. Wind 33 miles per hour. Too thick and stormy for astronomers to take occultations. Wind. E. 32.7 E. 32.7 E. 25.7.

{ −13.5 −13.5 −16 } { −16 −18 } 22.5

Jan. 8. (Thurs.) Clear, bright day. Light Easterly wind. Very light SE wind in evening.

Mor. −18° Mid. −24°

Thompson came over from his house in the evening, for coal oil and other things. He has caught six foxes since Christmas — total 13. Kahmeus also came over, he has caught nothing yet.

Mor.	Min.	Wind.
−18	−18	E 18
−18	−18	E 12.
−18	−24.	E by S 1.

Bernard, McConnell and Skey arrived from the west with their two sleds, bringing about 1600 lbs. of whale meat and blubber (Bernard's estimate). They had obtained the meat from "Billy" Natkusiak's cache on island in Sharaonaktok delta. Billy said that he did not need the meat as he expected to trap in that region for time and could get plenty more from the whale's carcass after he gets a house built later.

Skinned three more fat Phalaropes.

Collinson Point, Alaska.

Jan. 9. (Fri.).
W. Max. Min.
ExS2. -20° -25°
SWO -20° -20°
O-O. -23° -23°

Clear day. Wind very light, shifting around all points of the compass, not strong enough to turn the anemometer, most of the time. Perfectly calm at midnight. Slight haze around moon. Finished skinning the last of my frozen birds, and skinned out Spermophile.

Bernard sent the two Eskimos, Fred and Ikey, with sled to bring Thompson and wife home. Mrs. Thompson took seven Reindeer skins to select for two parkas for O'Neill and Clipman; ten Reindeer legs for mittens, also skin pants to be remade for Ikey. Yesterday she brought up two pairs leg mittens (deer-leg), three Bunberry snowshirts, two pairs snow-pants.

Mr. Blue took Eskimos home with the supplies which were issued to him.

Collinson Point, Alaska.

Jan. 10. (Sat). W. Mx. Mn. So -17° -24° EO -17° -24° Es. -14° -19°

Clear morning. Calm. Peculiar reddish or salmon color in southeastern sky about daylight (9:00 a.m.).

Bernard sent the two Eskimos up the creek with sled to get a load of small willows for bedding in dog stable.

Astronomers figured out mean local time from star observations taken last night. Our time has been about ten minutes slow.

Skinned two Spermophiles.

Thick fog during middle of day, but rather clear again in evening. Astronomers took observations for azimuth during the night. Fog rolling down from mountains and approaching rapidly from west at 2 p.m.

Collinson Point Alaska.

Jan. 11. (Sun.)

W. ##. ##.
E 20 Steady
E 21 Var.
E x S 27 Gusty.

Max. Min.
-14° -16°
-12° -15°
-15° -16°

Cloudy in morning. Calm locally, but clouds to southward scurrying westward. Wind started to blow pretty strong from East, about 10:00 a.m. and snow drifted pretty thickly during afternoon. Skinned three Spermophiles.

Tidal observatory. Several men helped F. Johansen start a snow house on the ice about 200 yds. outside (north) of sandspit for a tidal observatory.

Jan. 12. (Mon.)

W. Mx. Mn.
NNW 4 -5.5 -16°
W. 7. -7.3 -10°
WSW. 6. -5. -7.2

Cloudy all day. Much warmer than usual - from -5° to -10° below zero Fahr. Sky somewhat hazy in evening but stars visible.

Tidal observatory snow-house finished. The self-registering tide-gauge was cleaned up again by Mr. Cox (to remove any surplus oil which might stiffen and clog it) and set up outside the house but it soon froze up again. It seems that the observations must be by direct measurements at short intervals. Finished skinning the rest of my frozen specimens.

Collinson Point, Alaska.

Jan. 13 (Tues.) Slightly cloudy morning. Light East wind. Light southerly wind at 12:30 p.m. Slight haze. Foggy in afternoon, but clearing in evening.

W. Mx. Mn.
1/5 -5.° -21
1/2 -14.° -23
E&N 3 -13° -16

Jan. 14 (Wed.) Cloudy. Fairly strong westerly wind. Considerable loose snow on the ground. Drifting 1 foot high 8:00 a.m.

W. Mx. Mn.
1/8 13 -8 -18
1/1 13 -6.5 -8.5
1/22 -8 -9.5

Had Capt. Bernard cut down one of the big H.B. freight toboggans to 10 ft. length, put on two 1-inch thick strip runners with two inch iron shoeing, for use in the mountains back of Herschel Island where we expect to work next month.

Arctic Fox - Thompson came over today. He has caught fifteen Foxes up to date.

Collinson Point. Alaska.

Jan. 15. (Thurs.)

W. Mx. Mn.
W13 -9. -25.
SSW 1 -24.5 -33
E 11 -29. -36

Clear. Cold. Light easterly wind. Brilliant aurora borealis in north in evening. - a somewhat irregularly defined arch, about 60° up, with irregular shifting vertical shafts of light running up. At 8:00 p.m., mountains visible but hazy. At 2:00 p.m. mountains clear, with no refraction effect. Wind changed to East after 3:00 p.m.

Jan. 16. (Fri.).

W. Mx. Mn.
SE 2. -22.3 -30.6
WSW 1. -25 -27.5
0-0. -25.4 -28.

Wind high around midnight.

Clear. Calm. Very light southerly wind. Walked over to the "Alaska" to see how ice conditions are. Sides are practically free of snow down to water line, with small drifts about six feet out from sides; a big drift at bow, and a small pointed drift at stern. Came back around shore of bay. No signs of life or fresh tracks of anything. Thompson brought his family over, intending to stay a couple of weeks on the "Mary Sachs" as there are no foxes around his place west of here.

Collinson Point, Alaska.

Jan. 16 (Fri). About 3:00 p.m. Dan: Sweeney and Mr. Aagnout Casteel Arnold arrived with sled from S.S. "Belvedere". Sweeney brought a letter from V. Stefansson dated Herschel Island Jan. 4th, and other mail for the westward. Mr. Stefansson stated that he had decided to go some distance up the Mackenzie River, and did not expect to get back here before the end of January. He asked me to send a sled out to Cape Halkett for Mr. D. Jenness (anthropologist) who with Alfred Hopson as interpreter is staying with Eskimos there. Suggested that if possible Hopson be induced to come to Collinson Point with Jenness; if he will not come to be paid at rate of $15.00 per month from Oct. 15th to Feb. 15th; McConnell to go west with sled for Jenness.

He also asked me to send Mr. Wiltens down to the "Belvedere" at first opportunity to look at cinematograph of "Elvira" which is for sale.

Arranged for Wiltens to go back with Mr. Sweeney to the Belvedere.

Collinson Point, Alaska.

Jan. 17. (Sat.). W. Mx. Mn. E4 -18.2 -27.5 SE1 -17.1 -21. W.1 -13.3 -22.

Clear. Light East wind at 8.00 a.m. slightly hazy. Clear at midday. Sky overcast in evening, with light west wind.

Jan. 18. (Sun.). W. Mx. Mn. W:18 +7 -12 S:0 +4 -1 NW:0 +2 -2

Clear during most of day. NW wind & other air-currents flow SW. SE and NW. again. Overcast 11 p.m.

Spent most of day and night getting gear ready for people who are about to leave on sled trips.

Let Mr. Leffingwell have some articles (1 pr. Wool mitts, 2 pr. Wool socks) for other articles received from him in exchange. Captain Bernard is taking back some hard bread and other food articles to replace stuff used during Stefansson's sojourn there last month and Bernard's last trip west for dogfood.

The self-registering tide-gauge is now running smoothly. A lantern in the snow-house on ice keeps temperature high enough to prevent machine freezing up.

Collinson Point. Alaska.

Jan. 18. (Sun).

Arctic Fox - Thompson caught three White Foxes in his traps up the river today.

Jan. 19 (Mon.).

Clear a.m. Light East wind at 9:00 a.m. - 9° F. Calm in afternoon. + 9° F. Light westerly wind at 11:00 p.m.

"Belvedere" sled started East about 9:00 a.m. with Sweeney and Arnold. Dayrout Castely Wilkins and Johansen accompanied them. Wilkins goes to look at the "Elvira" cinematograph. Johansen wished to go down to see the naturalists at the "Polar Bear", and there seemd to be no other way to bring him back unless he goes now. Wilkins and Johansen can come back with Stefansson and Olsen. Told them they could take the three dogs and light N.J. sled from Crawford if they wanted to, but they thought it would be too much trouble to look after the dogs, not knowing how long they would have to stay and dog-food being scarce there.

Clear a.m.
Light E wind
-9° a.m.
Calm p.m. +9°
light West
wind at 11 p.m.

W. Mx. Mn.
ExN12 +2 -9
ExN1 -1 -9
-0 +9.5 -1

Collinson Point, Alaska.

Jan. 19. (Mon.) Two sleds started west shortly afterwards, one sled with eleven, the other with seven dogs; three men Bernard, Chipman, and Horan. They are going west to the Sharavanaktok delta for whalemeat and blubber for dog-food. Leffingwell went with them as far as Flaxman Island.

Spent day rigging up the double wall tent, repairing stove (putting in new sides) and getting out provisions for McConnell and Fred to go west tomorrow. They are starting a day behind the other sleds, in order not to over crowd the 'road-house' accommodations on the way. Bernard is taking 1 sack flour, 1 45-lb box hard bread, and 10-lb. pail of lard for them, and will get out enough dog-food, so that they can start west from the Sharavanaktok Camp with a good equipment.

Sun apparently was nearly up to the horizon at noon; southern horizon pink.

Arctic Fox. Thompson caught one Fox today.

Collinson Point, Alaska

Jan. 19. (Mon.). Issued to McConnell supplies for trip west, in addition to articles which he has already (brought from Barrow). Am allowing enough for twenty-day trip, with some extra to allow Jenness to give some to Eskimos who have been helping him.

Issued to McConnell:

2 Axes 1 Snowknife, 6 dog chains
15 Reindeer skins (for payment of Jenness' bills, et al).
Canvas for Jenness.

20 lbs. Rice
20 " Oatmeal
5 " Salt.
20 " Bacon
5 " Beans (+ Cooked Beans).
34 " Sugar
3 " Tea (1 lb Tabloid, 4 lbs. Black)
6 " Figs
6 cans Condensed Milk.
3 lbs. Butter
1 " Baking Powder.
1 doz. Candles.
2½ gals Coal oil.

Gasoline for priming
2 boxes Chewing Gum
3 lbs. Tobacco.

In addition:
1 box 45 lbs. Hard Bread, 1 sack (50 lbs.) flour, 10-lb. pail lard taken to Shaviovik River for McC. on Edmonds sled

Collinson Point, Alaska.

Jan. 20. (Tues.)
W. wind 8^00 a.m.
light snow.
Gale at 9:00 a.m.
60 mi. per hr.
W. Mx. Mn.
W×N 32.7 +28 +9.5
W×N 62. +29 +12
W×N 56.2 +12 ?

Cloudy in morning. Light west wind and increasing at 8:00 9 a.m. Light snow falling. Gale at 9:00 a.m., increasing all day, at times 60 miles per hour. Sled fortunately did not start out in morning. Comparatively warm all day, but fine powdery snow drifting so thickly as to be blinding, and speedily chilled any person who ventured out. Wind West by north.

Thermometer and Thermograph box blew off the roof, and minimum thermometer was broken.

Jan. 21. (Wed.)
Blizzard continued
Wind W by N.
Mx. Mn.
W×N 50 +2 ?
W×N 57.2 -6 ?
W×N 32.1 -8 ?

Blizzard continued all day. Wind W. by N. Wind moderated a little (from 50 mi. per hr.) Evening Clear, cold. Bright aurora.

Dog broke into McConnell's sled, which was standing in entry to dog stable and chewed up end of spotted Reindeer skin which I had to replace.

Stefansson's large dog "Watch" sick in evening - shivering and continually turning around; chewed skin off walls of his stall - ber-

Jan. 21. (Wed.)

forcing tin in many places and staining it with blood from the dog's torn mouth. He also kept chewing up willow sticks from his bed. Refused to eat but drank water. Seemed to know his name and would hold up his paw intelligently — not like a "muddy colly" dog. As he appeared to have internal cramps, we poured some Castor oil down his throat, forcibly holding his jaws open. Later he licked up oil poured from mouth of bottle

Jan. 22 (Thurs.) Slightly Cloudy Colder −18° light E. wind W. in evening.

Slightly cloudy in morning. Colder, about −18°. light E. wind. Mountains look much blacker than before, denuded of snow by wind. Wind shifted to South about 3:00 p.m. (very light), and soon to West. Blizzard from west began 9 a.m. suddenly about 6:00 p.m. wind 45 miles per hour. Spent most of day shovelling out passageways and dog stable. Sawed some wood.

	Mx.	Mn.
EO	−10	?
EO	−19	?
N43	+3	?

Piriglok, wife and four small children arrived from Hula-hula R. mouth. They brought two of our dogs ("Snowball") from Crawford's.

Collinson Point, Alaska.

Jan. 23. (Fri.). Wind W. by N. all night and snow drifting fiercely, cutting and wearing away most of new snow-wall put up yesterday. Wind moderated during forenoon. Cloudy. Red circular glow in south, over mountains, at noon, probably sun shining through snow fog. Light East wind in evening; sky clear. Cloudy at 10:30 p.m., and light snow falling.

Wind. W. by N. 41 mi. W. by N. 10 mi. SE 0 mi.

Max. Min.
+2 ?
-2 -4
-4 -9

Min. temp. now recorded from thermometer.

The dog "Watch" died during the night. Had natives skin him, and later I cut him open. Heart, lungs and other internal organs appeared normal; good flesh, some fat on omentum. Stomach contained a mass of bits of willow-sticks as big as my two fists, (from 1 to 2 inches in length), much chewed and splintered.

Arctic Fox. Heard a scratching noise around chimney about 8 p.m. and Blue and McConnell ran out. They saw a White Fox on the roof, and it later ran up to lantern. McC. shot at it but missed. It also attacked one of Tetigloke's dogs tied in entrance to stable.

Collinson Point, Alaska.

Jan. 24. (Sat.)
Cloudy all day. Light East wind. Light snow. Wind blowing hard in middle of day, and snow drifting pretty thickly. Wind shifted to West in evening. West at 10:00 p.m. Clear. Aurora.
McConnell and Fred started west at 8:00 a.m.
Thompson skinned a fat ♂ Fox weighing 9 lbs.

Wind E 6–3
E 20
NW 4.
Max. Min.
-2° -9°
-2° -2°
-2° -8°

Jan. 25 (Sun.).
Cloudy a.m. Very light East wind all day, about two miles per hour. Calm in evening. Clear. Aurora.
Rahmens came over today. He has caught no Foxes yet.
Arctic Fox. — Thompson caught one today.
Spermophile — Rahmens saw one on bluff near coast, on Thursday, January 22nd.
Sun not visible owing to heavy clouds on horizon.

Wind E b N o
E b N occasional gusts
Max. Min
-5 -19
-17 -20
-20 -25

Collinson Point, Alaska.

Jan. 26. (Mon.). Slightly cloudy a.m. Dull glow of sun's disk visible above mountains for about an hour and a half at midday. Clear p.m. Cold. -42°. Aurora in evening. Sent Blue up with Nahmens with sled and the only three dogs we have (besides the crippled "Red") to help Capt. Nahmens pick up a new trapping camp east of his house. Fixed up some clothes and equipment.

Slightly cloudy a.m.
Clear p.m.
Wind W 6
E 0

Max. Min.
-24 -28
-24 -31
-31 -41

Jan. 27. (Tues.). Clear. Cold -44° at 10:10 a.m. Light southerly air stirring. Blue came back from Captain Nahmens place in the evening. Our for. #166 ♀ 835-310-138.

Clear.
Cold.
Wind. E 0
E 10 var.
E 15.5 var.

Snow drifting a little evening.

Max. Min.
-41 -45
-40 -44
-38 -38

Collinson Point, Alaska.

Jan. 28. (Wed.) Clear. Cold. Clear. Cold. E. wind. E 10 var. E 6.5 E 4.5 Max. Min. -35 -38. -33 -35. -33 -38.

Clear. Cold, but a little warmer than yesterday. Fairly strong East wind, and snow drifting a little. Started a Ptarmigan net, of boot thread (linen), 2½ inch mesh stretched out, 14 meshes deep. This makes each side of a squared mesh 1¼ inches long. Had considerable difficulty getting the net started right, as I had forgotten making slip-knots, not remembering to hold light to the doubled string above the finger when making knot, so as to catch the loop with sliding half-hitch. [Net not satisfactory in use; meshes too small.]

Jan 29. (Thurs.) Clear a.m. Ind E. E b S. 2 var. E b N. 4 " E 5 " Max. Min. -37 -38 -33 -37 -32 -34.

Clear a.m. Light Easterly wind. Ptarmigan. Thompson saw two flocks some distance up the Creek today. Clear. No aurora at 12:00 a.m. Sun visible from 11 a.m. to 1:45 p.m. Faint arched aurora in mag. N. at 8 p.m. Aurora scattered in wisps at 12 p.m.

Collinson Point, Alaska.

Jan. 30 (Fri.)
Wind: E 6.2 var. NE 6.5 var. NE 11.2 var.
Max. Min:
-34 -34
-34 -37
-35 -37

Clear. Light Easterly wind. Cold. Slightly cloudy in evening, misty. Stars visible at 8:00 a.m. but observers able to read clearly without artificial light. Wind much higher during the night

Jan. 31.
Wind. — —
Max. Min.
-35 -38
-37 -38
-37 -41

Cloudy. Calm most of the day. Slight air stirring from south. Very fine snow at 8:00 a.m. Air-current variable at 2:00 p.m. Clear at 8:00 p.m. No aurora at 12:00 a.m. At 8:00 p.m. aurora in Magn. N. arch low and faint. Later. Narrow dense white band of aurora passing E. and W. and swinging to NW and NE at extremities. This band is bordered to the S. by a dim streak of aurora. Bright stars visible through even the densest band.

Feb. 1. (Sun.)

Clear. Calm. Light west wind in evening; slightly cloudy. Rahmene came over in afternoon — he has caught no Foxes yet

Wind
S E 0
W b S 2.
W b N 8.

Max. Min.
-34. -41.
-30. -34
-29. -30.

Feb. 2. (Mon.)

Slightly cloudy. Light west wind. Snow drifting a little along the ground. Wind covered around midday and shifted to easterly in evening. Bernard, Chipman and Koram returned about 8:00 p.m. with loads of whale-meat, also some goods sent over by Leffingwell. They passed McConnell west of Flaxman Island. He had taken three days going to Flaxman Island.

Wind.
W b N 18.
W b N
W b S 0
S E. 0.

Max. Min.
-22. -29.
-27. -24.
-24. -30.

Collinson Point, Alaska.

Feb. 3. (Tues.) Wind. W 6 S, 0. SE 0. SW 0 Max. Temp -36 -30. -30 Min-Temp. -37 -37. -40.

Clear. Cold. Calm. light variable air stirring, from about south at noon. Very light easterly air in evening

Arctic Fox – Very few have been caught by natives to westward, viz. Kopak, Kellkuruk, Paperok, Kanaurak and Tiriglok. Nattuniak has 42 up to date, mostly caught before he went west.

Caribou – Kopak saw ten some distance inland from his house (Kellerovilik) recently and Kallkuruk also saw some herd 9 there

Goods brought over from Leffingwell.

6 tin lamps and burners	4.80	10 wood bits	3.00
8 lamp chimneys	1.40	6 Chesels	3.00
6 lantern globes	2.40	1 Back saw	1.50.
1 leg. flat files 10 in.	2.40	1 try square	1.00
1 Whale spade	2.00	1 large Iron Kettle	5.00
1 Case Snap Soap	9.00	10 fath 1/2 in Rope	.60
4 Rip saws	5.60	8 leg Eyebolts	1.00
3 X Cut saws	4.20		
3 axes	3.00		
2 sets 12 pc Rel. tools	3.60		

56.50.

Collinson Point, Alaska.

Feb. 3 (Tues). Prices for preceding were figured at 100% over cost which = Seattle price + freight @ $40.00 per ton. Leffingwell also sent the following miscellaneous articles without charge.

Assorted Nuts	75 lbs. Iron Rod (Exchange for skeleton iron.)
5-10 lbs. Fish hooks	1 old Trunk
2 lbs. ± Alum	1 Musk-ox skull
1 piece fresh meat	1 lb. ± Hal
6 bottles Curry powder.	4 classical books.
3-4 doz. Eggs	

Musk-ox - skull - found in cut bank about eight miles East of Collinson Point.

Mountain Sheep - (Ovis dalli). Horns measured at my request, at 27 inches from tip to tip. Length and circumference not given.

Collinson Point, Alaska.

Feb. 4. (Wed.). Clear. Calm. Wind W in Ev. Wind SW 0 W 8 N 2 SW 6. Max. Min. −37. −38. −30. −39. −24. −31.

Clear, bright day. Cold. Calm in early morning. Very light breeze stirring from SW in afternoon. Wind shifted to west in evening and blew strongly enough to drift snow a little along the ground. Hazy cloudy in evening. Two dog teams hauling wood today. O'Neill and I cross-cut a large cottonwood tree into six sections for hauling. Built up snow-wall again around entrance to house. The last wall put up was too soft and was cut away by blizzard

Feb. 5 (Thurs.). Cloudy. Wind W. Wind. W 6 S 10. 6 W 6 S 6 S. 0. Max. Min. −18 −24. −16 −18 −16. −28.

Cloudy morning. Light westerly wind. Thermometer higher than yesterday, but wind raw and chilly.

Arctic Fox — Andrew Koranu found a fox dead in one of his traps, frozen stiff. It was very thin and may have starved.

*148. ♀ Vulpes lagopus innuitus.

L. 845 − 278 − 134 mm.

Collinson Point, Alaska.

Feb. 6. (Fri.) Wind. 0 to 56. 0 SW. 0 WSW 0. Max. Min. -28. -37 -31. -37. -31. -33.

Clear. Light SW. wind.

Fixing up poles for dome-shaped round tent. Cut ¾ in. oak strips 8 ft long, ¾ in wide, steamed and bent at ends. Twelve poles 8 ft. to overlap 1 ft 1½ ft.; tent to be approximately 9 to 9½ ft. diam., and 4½ to 5 ft. high. Poles to overlap and be lashed together in Eskimo style.

Set up double Burberry tent, 5 attached bamboo poles inside, opens like umbrella, no guy ropes. Warmed in few minutes with primus.

Feb. 7. (Sat.). Wind. W.S.W. 5. NW by N 0. S 0. Max. Min. -26. -33 -26. -26 -25 -26.

Clear a.m. Cloudy p.m. Light S. wind. Slight snow after 5 p.m. Crawford arrived 2:30 p.m. with N.Y. sled and two dogs, making distance from Utqiaġvik in six hours. No news further East. He has only eight Foxes. Natives and all in his vicinity have caught only two Foxes since Christmas. Tiktuk and family have gone up Hula-hula River.

Set up "Abercrombie Snow Tent" for first time. It is braced by two pairs of poles outside.

Collinson Point, Alaska.

Feb. 8 (Sun).

Wind:
E 8 var
E 9 stg.
E. 10. stg.

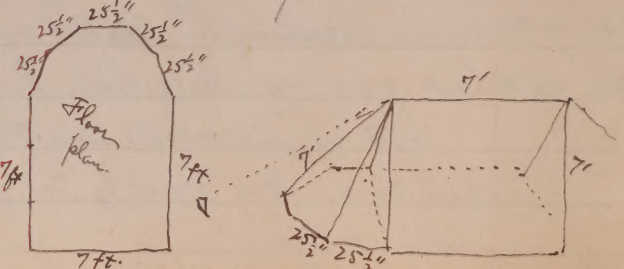
Max. Min.
-25 -26.
-26. -28
-28. -28.

Clear a.m. Cloudy p.m. Light East wind Cold. Thermometer remained at uniformly -28° all day and night

Arctic Fox — one caught by Thompson — the first one for two weeks

Willow Ptarmigan — Thompson saw two up on the hills, but could not kill them.

Set up green linen Alpine Tent, the most satisfactory and easy to pitch of any that we have tried yet, out of several "approved" patterns. A tent bare 7ft. square with slanting extension at rear end, extending length 3½ feet more. Set up by running 7ft. pole through long pocket at each corner, tips crossing at ridge; spread feet of poles apart, and fasten by guy rope at each end. A small accessory guy-rope is attached to middle of each side which pulls out sides a little.



Collinson Point, Alaska.

Feb. 9. (Mon.) Wind. E 14 Vel. E 13 Sty. E 8 Sty. Max. Min. -28. -28 -28 -28 -28. -30

Clear. Light East wind. Cold.
Capt. Bernard and Crawford started east to Crawford's house, with 13 dogs, taking some supplies for Crawford, and dog food for our trip east, as well as some dog food to cache at Crawford's for return trip.

8 5-gals. this tallow and meat Ca. 400 lbs.
4 bundles dried Salmon Ca. 200 "
Whale meat and blubber Ca. 100 "

Sewing most of day on cover for Alpine tent.

Feb. 10. (Tues.) Wind. E 0. E 1 Sty E 6 Sty Max. Min. -30. -37. -30 -37 -30 -33

Clear. Light East wind. Full moon.
Hahmeus came over from his house today. Reported seeing tracks of one large and two small Bears entering a den in snowbank about one mile inland.
Blue and Ikey went over to Alaska and started cutting a hole around the propeller. Schooner raised a little and water coming up a trifle in cracks between ice and schooner and ice.
The port rudder chain has broken.
Finished cover for Alpine tent.

Collinson Point. Alaska.

Feb. 10. (Tues.) Capt. Bernard returned with sled from Crawford's. Olsen also returned with sled and five dogs from Mackenzie: "Jack," "Bob," "Tip," "Bones," "Gray". The dog "Swash" left at Belvedere on account of sickness. Mr. Stefansson stayed in Mackenzie delta, keeping three of the dogs - "Kelly," "Fur," and one of his own dogs. Received a long letter from Mr. Stefansson relative to his operations since leaving here, letter dated January 24th Mackenzie delta. He said that he had heard a report that the "Karluk" had been sighted in October going north from the north end of Richard Islands, and was intending to wait until Mr. Phillips, the H.B.Co. trader from Kittegazuit arrives to contradict or confirm it. He stated that he had purchased from Willoughby Mason a cedar launch, 28 ft. long, 6 foot beam, tunnel built for speed, and equipped with 30 hp. automatic distillate burning engine; also a 10 hp. Gray motor and 40 gallons of oil. Dr. Blackpond total 7 dogs.

Feb. 10. (Tues.) Peter Pedersen with his toboggan and five dog teams has been engaged for survey work; after the ice breaks up he will carry a survey party in his whaleboat or the launch if we prefer, and deliver the party at a certain time at Herschel. He was said to be a gasoline Engineer, and is a sailor, "knows the delta better than any other white man."

"I have engaged Stotter Storkerson especially for the proposed ice trip, but as we expect to return from the ice in about six weeks or two months, at the most he will be available for the open water part of the delta survey. I have in mind that if we use two survey parties he shall handle one in the whaleboat and Pedersen the other in the launch."

He states that he is sending two sleds to Arctic Red River to buy dry fish to cache down towards the mouth of the river; also has arranged for fish at Red River next summer, the survey launches to freight it down.

Collinson Point, Alaska.

Feb. 10. (Tues).

He states that he has bought "Duffy" O'Connor's outfit, and arranged that Storkerson go to Martin Point and build a permanent camp there, engaging workmen at Belvedere, and hauling supplies there from O'Connor's and the Belvedere, as well as from Collinson Point. Storkerson was engaged for the ice work because of his experience.

"The choice of men for the ice-trip, the most delicate and important part of the whole equipping, cannot well be made at a distance. I should, of course, want volunteers for a work which some will imagine is dangerous and which everybody knows is no pleasure jaunt."

He suggests Johansen for sounding work, and Chipman for topographical plan that Chipman could go to Kotzebue (Kotzebue) later and join the survey party by boat.

"The details of that are easily arranged, and the only room for a slip would be if the ice party should be delayed in getting ashore.

Collinson Point, Alaska.

Feb. 11. (Wed.)
Wind.
E 10 Sty.
E 14 "
E 11 "
Max. Min.
-31 -33
-26 -31
-26 -27.

Clear. Cold. Fairly strong East wind. Snow drifting a little along the ground. Made some additional fixings to Alpine tent, set it up outside and made some further alterations. Capt. Hohmens and Blue made further examination of "Alaska" and think no damage has been done.

Made inquiries of members of the party in regard to volunteers for Mr. Stefansson's proposed ice-trip. All members of the scientific are unanimously against having anything to do with it, first, because it is outside of the province of the plans provided for members of the Southern party, and would seriously interfere with work which the scientific men have all planned to do this Spring. Dr. Mills has geological work to attend to. Messrs. Chipman and Cox have surveys to make, - and have no spare chronometers which can be

Feb. 11 (Wed.)

taken out on the ice without disturbing their rate and impairing their future accuracy. Secondly, they cannot see the advantage to be derived from going out on the ice in this region, where the same thing has been tried by Mikkelsen and Leffingwell and ice conditions are well known. The only thing that could possibly be accomplished is the location of the continental shelf a few miles further north or south by a series of soundings over ground which ships have often traversed in open seasons, and even the soundings would be practically valueless unless latitude and longitude are determined accurately.

Other members of the crews do not consider that they have shipped for any such project.

The Geological Survey men consider furthermore, that using the stores of the Southern party which are on the "Belvedere," and upon which the

Feb. 11 (Wed.) Southern party is supposed to subsist in part, for the next year, in carrying out new plans of Mr. Stefansson's which are in contradiction to the avowed agreements made with the authorities at Ottawa and the individual members of the party when they joined the expedition, ~~is~~ as in effect a misuse of Government property and stores. The members of the Southern party feel that they have sacrificed considerable time in getting into the country thus far, and that it is unjustifiable risking of their chances for doing efficient work next year if the supplies on hand (here and on board the Belvedere), and which there is no reasonable certainty of replacing next summer, are diverted from the object for which they were originally intended.

The orders from the Department of the Naval Service specifically state that there are two principal objects

Collinson Point, Alaska.

Feb. 11. (Wed.).

of the Expedition, and that to attain these objects it would be necessary to divide the Expedition into two parties, one for exploring the Northern regions oceanographically, and one to work along the mainland to the Eastward with definite instructions as to what was to be done or attempted to be done.

There is much dissatisfaction here at being asked to contribute a large amount of extra provisions, and supplies of various kinds for the extra employees of the ice camp, Pleasure, as we are paid, on account of the Mary Sachs coming in with practically nothing in the way of provisions, we shall be running short of many things before the end of this year, to say nothing of next year, and we are not very certain of having them replaced next year. The "Polar Bear" certainly has no supplies to sell, and the Belvedere can have

Feb. 11 (Wed.)

very little. In fact, Captain Cottle was obliged to use up some of our provisions which he was carrying as freight (viz. salt beef) on account of having the ship-wrecked crew of the Elora thrown into his care. These stores were estimated to last over, at least the whole of next year, and will undoubtedly do so, at least in the most important items, if judiciously and economically managed, in spite of the fact that we were caught in an exceedingly unfavorable game region. But they will not stand in undue drain, to ourselves and others in carrying out side issues to the main purpose and intent of the scientific members of the Southern Party for which party my instructions from the Government hold me responsible, that they are afforded means of carrying on their work in the most efficient manner possible, and according to the plans laid out before they joined the Expedition.

Collinson Point, Alaska.

Feb. 12 (Thurs.)
Wind:
E 9 sty.
E 21 "
E 11 var.
Max. Min.
-27 -27
-24. -27
-27 -26

Clear. Strong East wind. Snow drifting. Working on equipment for Dr. O'Neill's geological party. O'Neill has to be fitted out for his winter's work as well as for continuing work, either in the mountains or in the Mackenzie delta during the summer, until the vessels of the Expedition reach Herschel Island, probably not before July 20th (or very likely later).

Feb. 13. (Fri.).
Wind.
E 0.
E 0.
E 5 var.
Max. Min.
-25. -31.
-25. -31.
-28. -32

Clear. Calm. Cold. Working on Equipment for O'Neill's party.

Mackenzie Varying Hare. Northern Varying Hare. Lepus americanus macfarlani.

Four specimens were brought home by Olavus Olsen from the Mackenzie delta, shot in the large willow thickets, some distance south of Test Island, about twenty miles north of the tree line (spruce trees).

149. ♂ Lepus amer. macfarlani
150. ♂ " " "
151. ♂ " " " (Skull only).

Collinson Point, Alaska.

Feb. 14. (Sat.). Wind: E 20 mas. E 20 " E 20 "

Max. Min. -28. -32 -24. -28. -19. -21.

Clear. Calm. Working on stores, equipment, &c., for O'Neill and Olsen. Have decided to send Capt. Bernard along with O'Neill to Herschel Island, loading his sled largely with dog-food from here and from the dog-food cache at Crawford's. O'Neill will take the food supplies from here, such as we do not have on the Belvedere, and Bernard can take a second load of staples from the "Belvedere" to Herschel Island, so that O'Neill can begin work up the Herschel Island River with the least possible delay, and have a base of supplies to re-outfit from, after making a reconnaissance of the Herschel Island River, and then start on the rivers further east.

Mr. Chipman and Mr. Cox do not think that they can do much efficient surveying until a little later, and furthermore, do not care to leave here until Expedition matters are put on a more definite basis for the future

Collinson Point, Alaska.

Feb. 15. (Sun.)

Wind.

ESE 3 mm.
NE 0 Stly
NE 0. "

Max. Min.
-15.5 -18.
-15. -16.
-16. -22.

Clear. Light East wind. Working all day on preparations for trip East. Mr. Cox got out all the food supplies, and the two sleds were loaded up.

As Dr. O'Neill will be obliged to work independently for some time, I issued him Fifty Dollars ($50.00) cash for contingent expenses, and authorized him to Engage services of natives or others, promissing up to the amount of One Hundred Dollars, payable at Herschel Island next summer on arrival of C.G.S. Alaska, agreeing on my part to retain the following articles for selection from

1 .30-30 Winchester Rifle (Carbine)
1 Case 30-30 " Cartridges
1 .44 Cal. W.C.F. Rifle
1 Case .44 " " " Cartridges
1 Bolt Calico
Tobacco, 25 lb.
Shot, 30 lb.
1 12-gauge Shotgun with Reloading Tools
50 12-ga. shotgun shells 30 primers
2 sacks flour.

Collinson Point, Alaska.

Feb. 15. (Sun.).

Food supplies taken by O'Neill from Collinson Point.

Butter (Blue Rose)	60 lbs.	Malted Milk (Bordens)	20 lbs.
Tea (Tabloid)	10 lbs.	Milk (Horlick's Pack.)	12 "
Coffee (Ground)	10 lbs.	Raisins (Seedless)	20 "
Cocoa	5 lbs.	Figs	20 "
Lard (1 case)	60 lbs.	Prunes	20 "
Baking Powder	10 lbs.	Rice (sack)	100 lbs.
Baking Soda	5 lbs.	Candles	10 lbs. Cn. 50
Matches, 12 packets.		Soap 6 bars Castile, 6 bars Sapolio	
Salt — 10 lbs	Pepper ½ lb.		

For trip, 12 loaves bread, sack of doughnuts, 6 cans milk, 1 slab bacon, etc.

To O'Neill - Equipment.

1 Nome Sled (Davenport's) 1 toboggan (shod)
2 primus (Coal oil stoves) 1 bottle Alcohol for priming
2 Galvanized 2½ gal. Cans
1 Green "Alpine" Tent, with white drill cover
1 small double Burberry (for Bernard's return).
1 new galvanized iron stove (20 oz.) with 3 pipes
1 huge handsaw, 1 large axe. 4 files (ass'd),
2 pr. snowshoes (O'Neill and Olsen).
Ice creepers 1 pr. Cloth (ass'd) for repairs
86 Reindeer legs (for 5 pr. boots), 4 pr. boot soles
1 12-ga. Shotgun 1 case (500) Shells No 4 shot.

Collinson Point, Alaska.

Feb. 15 (Sun).

(Additional Equipment taken by O'Neill)
1 Geol. Survey Chest - Geological Equipment.
1 Sack personal equipment, large waterproof, Clothing etc.
(Clothing: One muskrat parka, one large new Reindeer parka, 1 pr. Reindeer pants. Deerskin, sheepskin and woolen socks; mittens
Boots 1 pr. Deerleg, 1 pr. felt, 1 pr. Long water mukluks, 1 pr. large Shorpacks, 1 pr. Short water mukluks, 4 prs. Moosekin moccasins.

Overalls and woolen underwear.
1 Extra box T. & B. tobacco (17 lbs). 1 box cigarette papers, 1 box Chewing gum (20 prs), 2 pr. Glass Snow Goggles, 1 pr. Metal Goggle.
Sleeping bag (duffel-lined) - R. M. A. loaned.
For Olsen - Clothing equipment completed for 3 months. Includes 1 pr. Deerleg boots, 1 pr. felt boots, 1 pr. Shorpacks, 1 pr. Seal mukluks. Also 6 plugs Payroll, 10 plugs "Westover" tobacco.
1 good Deerskin sleeping bag (from Capt. Nekumens)

Collinson Point, Alaska.

Feb. 15. (Sun).

Wrote letter to Dr. J. J. O'Neill in re work in Herschel Island region, also letters to V. Stefánsson, to Capt. S. F. Cottle, and Mr. Storkerson, who is working for Mr. Stefánsson to the Eastward. Storkerson sent a long list of demands by Mr. Johansen, a large part of which we are not in a position to supply. Am sending him such articles as we can spare, as follows.

2 sail needles, 1 ball twine, 3 prs wool mittens, 1 pr. sealskin (hair) boots, 1 tea pot, ½ dog plates, ½ dog ~~plates~~ Cups, 1 wash basin, 2 tin baking pans. 1 Ingersoll watch, Ejnar Mikkelsen's "Conquering the Arctic Ice".

Weighed six sleds as follows. (on Navy Steelyards)

1. Capt. Bernard's Nome sled	200 lbs
2. "Davenport" Nome sled	114 "
3. Native-built Nome sled	138 "
4. Point Barrow sled (from Brower	106 "
5. " " " "	104 "
6. H.B.C. hardwood toboggan, shod	84 "

Collinson Point, Alaska.

Feb. 16. (Mon.)

Cloudy. Strong East wind. Snow drifting pretty thickly. Sleds unable to start east.

Wind.

E 24 var.
E 24 "
E 22 "

Max. Min.

-20. -22.
-12. -20.
-12. -13.

Feb. 17. (Tues.)

Cloudy. Strong East wind (same blizzard as yesterday. Wind lighter towards noon, but variable and gusty

Wind.

E 23 var.
E 12 "
E 14 "

Max. Min.

-13 -15
-8 -14
-8 -8.

Collinson Point, Alaska.

Feb. 18. (Wed.).

Wind.

E 8 var.
E 12. var.
E 12 "

Max. Min.

−2. −8
+1. −2.
+2. +1.

Cloudy. Very light East wind at 8:00 a.m. Warm. Sleds started east about 10:00 a.m. — O'Neill, Bernard and Olsen. Found O'Neill's Keys shortly after they left, and — had Blue hitch up racing sled and overhaul them. He found an Arctic Fox in one of his traps on the way home. Found out later that O'Neill had also left behind an aluminum two-man cooking outfit. Wind increased towards evening. Cleaned up house after the sled party — stowing away some of the surplus impedimenta in empty bunks. Cleared out a space for Mr. Wilkins to make a small photographic dark room near the door. Started overhauling and re-labeling Medicine chest. The drugs in the big case, the first aid sets, and the leather field cases, have only the names and dosages on labels, and I started adding labels giving physiologic and therapeutic action — and the general use of each article.

Collinson Point, Alaska.

Feb. 19 (Thurs.)
Wind.
E 24 var.
E 30 "
E 25 "
Max. Min.
+3 +2.
+3 -1.
-1. -5.

Cloudy. Strong East wind. Much warmer. +3° F. at 8:00 a.m. Nakmenus came back from his house during the day. Working on field medical outfits, making some substitutions for articles of less use.

Feb. 20. (Fri.)
Wind.
E 30 var.
E 23 "
E 33 "
Max. Min.
-5. -14.
-14. -14
-14. -15.

Cloudy. Strong East blizzard. Snow drifting. Clear overhead in evening, but pretty thick near the ground. Colder than in the morning

Feb. 21. (Sat.)
Wind.
E 24 var.
E 20 "
E 20 "
Max. Min.
-15. -22.
-22. -22.
-22. -27.

Cloudy. Strong East wind, and snow drifting thickly. Overhauled and sorted out various tools and Equipments. Clear overhead in evening. Cold.

Feb. 22. (Sun.)
Wind.
E 18 stg.
E 22 "
E 22 "
Max. Min.
-26. -28.5
-27. -28.
-26.5 -29.

Clear. Strong East wind. Cold. Snow drifting thickly. This blizzard has been blowing continuously since last Monday morning, with the exception of a few hours (Wednesday forenoon, Feb. 18th). so that I do not imagine Dr. O'Neill's outfit have got beyond Crawford's house yet.

Collinson Point, Alaska.

Feb 23. (Mon.)
Wind.
EbS 9 sty
E 12 var.
SE 4 "
Max. Min.
-26.3 -30.5
-26. -31.
-26. -30.

Clear. Light easterly wind in morning. SE in afternoon. Cold. Decided to make a new "Alpine Tent" for our trip to Herschel Island, and for use of Clipman and Cox this spring. The same size as O'Neill's tent, but lighter than the heavy waterproof linen of O'Neill's tent. The tent to have lining inside, instead of a fly outside. Cut tent out of Green Egyptian Cloth (long fibre Egyptian cotton, waterproofed) purchased from David Abercrombie, 311 Broadway, N.Y.

Feb. 24 (Tues.)
Wind.
E 4 sty.
EbS 6 "
EbS var.
Max. Min.
-30. -32.
-22. -31.5
-23. -32.

Clear. Light east wind. Cold. Working all day on tent. "A perfect day." (Nansen, &c.). Brilliantly clear

Collinson Point, Alaska.

Feb. 25. (Wed.)
Wind
E b S 11
E 12
E b S 6.
Max. Min.
-30. -32.
-29.5 -32.
-28.5 -32.

Clear. Light E. wind. Calm p.m. Wind shifted to west at midnight. Bright aurora at midnight. Clear at 8.00 a.m., with snow beginning to drift slightly

Feb. 26 (Thurs.)
Wind
W 18.
W. 18
W 15

Max. Min.
-31. -36.5
-32. -36.5
-31.8 -34.0

Clear. Fairly strong west wind. Snow drifting. Working in tent. Bright aurora at 1.00 a.m. Wind changed to west via north at midnight. Snow drifting 1 foot high at 8.00 a.m. Foggy at times in afternoon, owing to drift.

Collinson Point, Alaska.

Feb. 27. (Fri.)
Wind.
W 3 obj.
E 2 var.
E b N 14.
Max. Min.
-32 -34.
-20 -32.5
-26. -32.

Wind dropped at midnight. Clearing at 2:00 pm, threatening in evening. Very stormy appearance to SW with white stratus clouds spreading to the east along base of mountains.

Feb. 28. (Sat.)
Wind.
E 10 var.
E 11 obj.
NE 3 var.
Max. Min.
-25. -31.
-24. -25.5
-20. -21.

Slightly cloudy. Light variable wind. Finished green Alpine Tent today (except lining). Overcast, clearing in evening. Willow Ptarmigan. Thompson saw a small flock up the creek and shot one. Hazy aurora.

Collinson Point, Alaska.

March 1. (Sun.). Wind.

W 12 var
W 0 —
E 0 —

Cloudy in forenoon. Clear p.m. Wind west p.m. East wind after 6:00 p.m.

Capt. Nahmens and Hoy went up on tundra after Ptarmigan, and saw numbers but killed none.

Mouse (Microtus sp.) * 152. ♂
108-13-18 mm. Found dead on snow, with tail broken off.

Lemming (Lemmus sp.) * 153. ♂
111-14-19. Found dead on snow. Pelage similar to November skin.

Max.	Min.
-20.	-26.
-19.	-26.
-22.	-32.

March 2. (Mon.). Wind

E 12 var
E 6 "
E 4 "

Clear. Light East wind. Cold. Johansen saw a flock of Willow Ptarmigan two or three miles inland.

Working on tarpaulin floor for tent today.

Max.	Min.
-32	-33.
-25.	-33.
-24.5	-29.5

Collinson Point, Alaska.

March 3. (Tues.)
Wind.
W 6 var.
W 5 "
W 0 "
Max. Min.
-29.5 -35.
-27. -35
-27. -37.

Clear. Light west wind. Very cold. Calm at 9:00 p.m. Brilliant aurora. Several people out hunting today - Cox, Chipman, Johansen, Williams, Blue. Willow Ptarmigan = Cox shot one. Several Ptarmigan were seen, but they were very wild.

Blue took sled several miles up creek near Nahmens' place, but saw no signs of animal life.

Microtus = Thompson brought in one which he found dead on the snow

March 4 (Wed.)
Wind.
— 0 —
E. 4.5 var.
W. — —
Max. Min.
-37. -46.
-31. -43.5
-31. -43.

Clear. Very light southerly wind. Very cold. -45° F. at 8:00 a.m.

Aiatuk and Papiroks boy (ca. 15 yrs. old) arrived about noon, having camped last night East of Saleroshit River. They stopped here only for lunch and went on towards Flaxman Island. They came down about a week ago from the mountains on Hula-hula River, where they had stayed about a month

Collinson Point, Alaska

March 4 (Wed.)
Wind- .
0
E 4.5 mi.
W. — —
Max. Min.
-37. -46.
-31. -43.5
-31. -43.

Hula-hula River notes, February, 1914 (from Aiakuk). He went up the river only to Katak Creek (about one day's journey inside the Mountains.

Mountain Sheep (Ovis dalli). Only fourteen Sheep seen, and six killed; one large ram killed.

Willow Ptarmigan — very abundant in foothills; more numerous than for some years past.

Duck Hawk (Falco peregrinus anatum) "Ki'la ra'vik." One seen.

Snowy Owls (Nyctea nyctea). None seen inside the mountains, but numbers seen outside.

Small birds — None seen at all.

White Foxes — Very scarce. One caught.

Red Fox — none seen. He says they are very rare on Hula-hula, but always common on Saliochit River.

Wolverine — one track seen. No wolf tracks seen.

Collinson Point, Alaska.

March 5 (Thurs.)

Wind

W 4 var.
W 6 "
W 0 "

Max. Min.
-41. -43.
-31. -41.
-32. -40.

Clear light westerly wind. Storker T. Storkerson, with Pikalo and boy arrived about 4:00 p.m. from Stefansson's "ice camp" at Martin Point. He reported that no further word had been received from V. Stefansson. Storkerson says that his force of Eskimo women have made sleeping bags, parkas, mittens, and a dozen pairs of deerleg water boots for the ice trip, and that he has practically completed all the preparatory work that Stefansson had ordered him to do. He did not know what he could do further except bring his watches down here to be rated by the Chronometers. He is somewhat discouraged because Stefansson has stayed away so long when he should put in some time making arrangements if he still contemplates making a trip out on the ice.

Reports that Dr. J.J. O'Neill passed aboard the S.S. Jua

March 6. (Fri.)

Clear. Light west wind. Cold. ca. −35° F.

Wind:
W 2 var.
W 1 "
W 6 "

Max. Min.
−40. −42.
−31.5 −40.
−31.5 −38.5

Stokerson went back to Martin Point again today, taking along "Ikey" Augatatsiak. He took two dogs from here ("Tullurik" and ——), also the broken Point Barrow sled, which he said he could readily repair. Pikalo went east with him today. Pikalo had been engaged to come here with Stokerson from Crawford's cabin. Gave Pikalo one sack of flour and some whalemeat for dogfood, as he was out of both and had come with Stokerson as an accommodation to the Expedition, Stokerson being short of dogs. As he (Pikalo) wanted to go to the mountains for sheep and had only a small light toboggan, I loaned him the light N.Y. sled on his promise to wash it and also to bring me what sheep-skins with skulls he could get for scientific specimens. He said that

Collinson Point, Alaska.

March 6. (Friday) the sheepskins were no good to him at this season, as the hair is falling loose, but he would bring me the skins of all that he killed.

March 7. (Sat.). Clear. Light West wind.
Sewed remainder of tent lining today, and put on strings.

Wind.
W 13 var.
W 12 "
W 0 "

Max.	Min.
-37.	-39.
-28.	-37.
-28.	-37

March 8. (Sun.)

Cloudy. Light west wind. -37°.

Wind

W6N 2 var.
W6S 1 "
W 3 "

Max. Min.
-37. -40.
-26.5 -36.
-26.5 -33.

V. Stefansson, Peter I. Petersen and Itey (Eskimo) arrived about 3:00 p.m. from the Eastward - Herschel Island and Mackenzie delta. Stefansson engaged Petersen to go to Fort McPherson with him and brought him along here with the idea of using him as assistant in the spring work or on one of the vessels later. One of our dogs "Kelly" died on the Mackenzie River trip.

Mr. Stefansson was very much annoyed and angry because none of the men at Collinson Point, of the Southern Party, had signified their willingness to volunteer for the trip northward on the ice which Mr. Stefansson now contemplates making from Martin Point, about 50 miles East of here.

Collinson Point, Alaska.

March 8. (Sun.). When Mr. Stefansson was here in December, he had disclaimed any intentions of connecting his activities with the Southern Party, and insisted on my remaining in charge at Collinson Point. I had pointed out to him that as he was assuming only a nominal authority and responsibility in regard to the party, the actual responsibility of getting the party in to their field of work, seeing that they should have opportunity of doing their chosen work, and also to bring them out safely rested upon me.

Mr. Stefansson asked that all men connected with the Expedition, including sailors and cooks, be called to a meeting in the living room this evening. Mr. Stefansson took the floor, and gave for an hour or more, or less imaginative account of the whole history of the Expedition, raked me over the coals for one and all before all hands, for not falling in

March 8. (Mon.) immediately with all of his plans, which he elaborated. I refused to be drawn off into said arguments, not even to mail mis-statements. The main point at issue was that we considered that the "Alaska" could not carry in all the equipment and provisions needed for a party of our size, and that an auxiliary vessel would have to bring in auxiliary supplies. Mr. Stefansson would not agree to definitely assign either the "North Star" or the "Henry Sachs" to this work, insisting on having both ready for his use, according as his plans should mature from day to day.

March 9. (Mon.)
Wind.
W 7 var.
W 24 stg.
W 6 N 26 "
Max. Min.
-33.5 -34.
-29.5 -33.
-31. -36.

March 9. I gave a definite ultimatum from the Southern Party that nothing would be accepted from him except a written guarantee in black and white in regard to one of these vessels for the Southern Party. Discussion lasted until 3:00 a.m. (Snow in evening.)

March 9. (Mon.) Cloudy. Light west wind. Blizzard in evening. Working in store house. Cold.

Collinson Point, Alaska.

March 10. (Tues)
Wind
W 6 N 36 M/H
W 6 N. 40. "
W 36. "

Clear overhead. Blizzard from west. Snow drifting thickly 50'-60' high. Wind 36 mi. per hr. -36° F.

Mr Stefansson has objected very strongly to putting down records and requisitions, and orders in writing. He has complained that the men here are not even now co-operating with him. Suggested that perhaps things would move a little faster if he would put down in writing some of the things he had agreed to. He was insulted, but agreed.

Max.	Min.
-35	-38
-31.5	-37.
-30.	-31.

March 11. (Wed.)
Wind.
W 10 var
W 4 "
W 6 W 3 "

Getting out stores for Stefansson's ice party.

Provisions and stores are also being made ready for Chipman and Cox to take along to the eastward.

P. L. Petersen is also being supplied with clothes as per agreement with him.

Sun very dazzling on snow 2 pm.

Max.	Min.
-26.3	-30.
-17.	-26.
-16.	-30.

Collinson Point, Alaska.

March 12 (Thurs.)
Wind.
SW 1 Vel.
W 3 Sky
SbW 1 Vel.
Max. Min.
-30.2 -35
-27.6 -33.
-28. -40.

Clear. Very light East wind. Thompson and Ikey went to Crawford's to haul two sled loads of supplies for ice trip — dog food (fish and tallow), pemmican, malted milk. Wilkins photographed outfit at different angles, so that Horlick's Malted Milk, Underwood's pemmican, &c, should get their just advertising dues.

March 13. (Fri)
Wind.
W 3 Vel.
W 14 "
W 21 Sky
Max. Min.
-39.5 -43
-32 -39
-32 -36.

Clear. Light west wind. Snow drifting slightly along the ground. Thompson returned from Crawford's — three Eskimos with him — Inyukuk, wife and child. The woman had sore teeth so that she was unable to eat hard food — gums swollen and red around base of teeth. Treated her gums with Chlorate of potash. Cures very soon (pyorrhea?). Wind increased greatly at midnight tonight.

Collinson Point, Alaska.

March 14 (Sat.)

Wind

W 30 sty.
W 33 "
W 36 "

Max. Min

-34. -36.
-34.5 -36.
-37.5 -40.

Cold. Strong west blizzard.
Tide gauge shows that water has lowered 4-5 inches since early morning.
About the stiffest day of the year thus far.

Collinson Point, Alaska.

March 15 (Sun.)

Wind
W 32 sky.
W 21 decr
NE. 2. decr

Max. Min.
-41. -43.
-36 -43.
-36. -40.5

Blizzard. At 8:00 a.m. -43° F. and wind 36 miles per hour. Sky cleared in forenoon, but still cold (ca. -40°. Wind moderated towards noon. Calm at 5:00 p.m. East wind at 8:00 p.m. Still working on Stefansson's supplies. His original requisition as submitted has quite outgrown itself.

List of supplies taken from Collinson Point:

Underwood Pemmican (Man) 120 lbs.
Malted Milk Borden 110 Horlick's 12 122 "
Lard Compound 360 "
Dry Fish (Salmon) 14 bales (aver. 720 lbs) 720 lb
Tobacco Tea 4 boxes
Jaeger Socks, 2 pr. 3 pr. Instr. Mitts.
2 8-gal. Kerosene tanks. 3 " gray wool "
200 rounds Mannlicher. 1 pr. wool gloves.
2 small cod-lines (Sf.) 2 sacks salt
1 large " " " 1 pr. Eskimo "
Aluminum Camp-sets (2 three-man sets).
4 lb. Tobacco Co. 1 pr. deerlegs mitts,
1 Tanalite tent and an inner lining for pockets (Gyp
this of white Burberry.
1 patent green Burberry tent (only here)

Collinson Point, Alaska.

March 15. (Mon.) This evening, just before going East, Mr. Stefansson finally handed over his much grudged explanations and instructions in writing. It evades some of the important points of issue rather skillfully, and attempts to confuse others by entering into a mass of detail about non-essential points, and criticizing things at Collinson Point. As he requests that a copy be sent to the Government if he does not come back this spring, I shall have to go into it later in some detail possibly.

The low temperature and heavy wind made this one of the hardest days of the year. Sloan stopped rather suddenly in afternoon

March 16. (Mon.) Wind. Light airs. Calm. Light SW.

Max. Min.
-28 -40.5
-8 -8.
+5 +3.5

Clear. Light East wind in morning. Calm at midday. Wind Westerly in evening. Cloudy with slight snow falling.

The "Ice party" and survey party for Herschel Island got away this morning.

V. Stefansson (2 sledges, 7 dogs), with Peter Bernard, J. H. Wellman and Fritz Johansen. Bernard, Wellman and Johansen are to accompany the support party on the ice and return after ten days, while according to present plans, V. Stefansson, Storker T. Storkerson, and Harmont Castel (of S.S. Belvedere) are to be on the ice for two months.

Kenneth G. Chipman and John H. Cox, with Peter L. Petersen as dog-driver (with Petersen's five dogs) started at same time. Chipman will help rate the watches at Martin Point, then Chipman and Cox intend to rate chronometers at the International Boundary 141st Meridian then proceed to Herschel Island. The intention

Collinson Point, Alaska.

March 16 (Mon.)

is for Cox to join O'Neill on Herschel Island River, to connect up O'Neill's geological work, while Chipman works into the MacKenzie delta with Petersen. When the river breaks up they will try to survey as much as possible of the Mackenzie delta, and all join the "Alaska" at Herschel Island by August 1st.

D.W. Blue went along with our sled and six dogs, to carry some of the overflow stuff as far as Crawford's. Stefansson will have another team waiting there with "Key"

Inyukuk, wife and Child went along with the crowd. The woman's teeth and gums had much improved under chlorate of potash treatment. They would have stayed here if invited, I understand, but I know Inyukuk of old as absolutely worthless while the woman is a trouble-maker. After staying here for a while with free

Collinson Point, Alaska.

March 16 (Mon)

board and medical treatment, she tried to persuade Mrs. Jennie Thompson that she was turning out boots and skin clothing (for the ice party) much more rapidly than she needed to do, and advised her to take life more easily, so that we would need to get some more squaws around the place — a true walking delegate.

Everything cinematographed at start, the intrepid ice-men, sleds, flag-pole (with Union Jack under the Stars and Stripes).

Took four pictures 7-8-9-10 on roll of film which had been in my camera hanging in the shed since November.

Took down the "Abercrombie Snow Fruit, which had been standing through several blizzards as an experiment, supported by four Jamboos. Stefansson took the oilcloth lining it with white Burberry cloth

Collinson Point, Alaska.

March 17. (Tues.)
Wind. SE air. E&N. Light.

Max. Min.
+13. +8.
+26. +9.
+17. +4.

Clear, warm day. +15° F. at noon. Snow melting on dark surfaces in sunshine. Light S.E. wind during forenoon. Calm in afternoon. Strong west wind started about midnight.

Working on stores, in storehouse and on rack. Repacking and readjusting after the hubbub and turmoil of the last week.

Capt Hahnenn told me that he had talked with Stefánsson about going on the "North Star" as master, and for the purpose of studying oceanography, but said he would not quit the "Alaska" unless a substitute was found to take his place. Stefansson has been sounding all members of the crew of both vessels, in order to find what men he can enlist for the new Northern party, under the assumption that we can pick up a crew anywhere on the coast who will be willing to go to Coronation Gulf.

March 17 (Tues.)

The taking of the "Mary Sachs" will cripple us in many ways. P. Bernard the master, bring the best dog-driver with best sleds and dogs, and Thompson being under bonds to go wherever Bernald goes, will take his wife, the only available seamstress for our skin clothing. Crawford, the engineer of the "Mary Sachs" is also a good all-around man with Arctic experience. Stefansson has worked things up so that he can jump either way, as best suits his personal convenience (he being the only man who makes any scientific pretensions on the northern adventure), while things are left all upside down and undecided for the scientific staff of the Southern party. As he stated in his letter to the Department of the Naval Service, this will only delay the work of the Southern party [all the scientific work can wait until the big newspaper

Collinson Point, Alaska

March 17 (Tues.)

hurrah stunts are served], but the scientific men who have entered the Medic work for a certain definite time, to do certain specified work, do not feel inclined to look at the matter in that light. The whole business puts me in a very difficult position. If I had only my personal interests to consider, I would consider that Stefansson's abandonment of the Karluk and coming here to take charge would give me a lucky chance to withdraw from a difficult and thankless task, and let the leader do some of the work he has cut out. However, Stefansson refuses to take actual charge, insists upon my nominal responsibility while he lays out new schemes every time the wind shifts. Our plans are changed - the geological work made secondary, the topographical men - Chipman and Cox - have a

March 17. (Tues.)

most comprehensive scheme for surveying the Mackenzie delta in a month or two of summer's work. If the topographers fail to do all this work in the short time allotted it will be attributed to their "lack of energy" and not to the brain that planned it. At any rate, the ice-trip is well started, and is bound to be a success. At any rate, the "London Chronicle" will have a story of daring deeds, the Gaumont Co. will have a cinematograph record of the intrepid heroes, and if no new land is discovered in that particular region, the blame can be laid to lack of energetic support and enthusiastic self-sacrifice by the scientific staff and crew who failed to volunteer their services.

Willow Ptarmigan. Thompson saw a flock up the creek.

Collinson Point, Alaska.

March 18 (Wed.)

Wind:
W 20 Sty.

Max. Min.
+15 +4.
+17 0
+12 +6.

Clear a.m. Light westerly wind at 8 a.m. A strong west wind had started up about midnight increasing to a gale at 1:30 a.m. Wind light by morning. Bright aurora in evening. Warm day. Checking up stores. Cleared snow off rack. Hauled load of wood with Noram; no dogs here now. House rather vacant — only Nahmens, Brooks, Noram and myself.

Nahmens slightly under the weather. Nearly everybody had had bad colds, almost like a light attack of influenza, since Stefansson and party came back from the Mackenzie and from the ships. We have been free from colds most of the winter.

March 19 (THURS.)

Wind:
8 a.m. Variable
8 p.m. Westerly

Max. Min.
+4. −8
+15. +6
+15. +8.

Clear a.m. Light westerly wind, hauling to South. Calm at noon. Bright hazy afternoon. Much mirage. Apparently much large ice and open water far outside. Nahmens and Brooks went hunting up the creek but saw nothing.

Blue returned today. He had gone with Stefánsson as far as the natives' camp on Barter Island in order to help out with the heavy loads.

Collinson Point, Alaska.

March 20. (Fri.) Wind. — — — — — — W. 2 afpm. Sly.

Max. Min.
+15. +8
+24. +12
+19. +8.

Clear. Light South wind.

In the afternoon Ed. ("Duffy") O'Connor and "Tommy" (Nome Eskimo from the Polar Bear,") arrived with sled and four dogs from the Eastward, bound for Nome, via Barrow. He brought a letter from V. Stefansson stating that ice trip preparations were going well, and that they expected to start on the ice March 21st. Stefansson stated that he had agreed with O'Connor in buying his total stock, to outfit him with what he needed in the line of food from Collinson Point, and if possible to let him have some dogs; not to sell any of McConnell's team, but to let him have the best one of Jenness's for $25.00 and any of the others for $15.00 a piece.

Burt McConnell, D. Jenness and Fred (Eskimo) arrived from the west about 8:00 p.m. from Barrow. They brought mail from Barrow, leaving Barrow Feb. 28th.

March 20 (Fri.) McConnell's dogs were in very poor shape, half-starved and some of them frozen on flanks. Fred was very much disgusted with the trip, saying that McConnell had not allowed him to give the dogs sufficient food to keep them going, that McConnell had threatened to beat him, and that he (Fred) would have quit at Barrow but for the fact that he wanted to keep his job with the ship.

Aiatuk and his wife Tuklumanna arrived from the East at same time as Duffy O'Connor bound for Flaxman Island.

Caribou — Duffy O'Connor says that the natives have killed a good many caribou recently — east of Demarcation Point, and said that as many as "two thousand" had been seen in one herd. Iglue and another Eskimo had killed about sixty

Collinson Point, Alaska

March 21. (Sat.)

Wind: E 14 sky E 12 "

Max. Min.
+19 0.
+15 +6.
+9 +3.

Clear. Strong East wind. Snow drifting along the ground. Decided to send McConnell along to try to overtake Stefansson, as Stefansson wished to have him hurried along as soon as possible, with mail, etc. Only four of the seven dogs which he brought were in respectable shape to travel so I hired Kiakuk to go with his team of four dogs as far as Crawford's today, and come back tomorrow (2 days with team, at $3.00 per day). Wrote note to Crawford asking him to help McConnell along, to go with him to Martin Point if necessary. If McConnell is not able to overtake Stefansson he is to proceed to Duffy O'Connor's place and make a detailed inventory of the stuff there, and in absence of further orders, to inventory the "North Star" stock after completing the O'Connor inventory.

Collinson Point, Alaska.

March 22. (Sun.)

Wind.
E 12 sty.
E 32 "
E 35 "

Max. Min.
+9 -2.
+10. -5
+1. -8.

Clear. Strong East wind. Set up some bent oak strips which I had made for an Eskimo type of dome-shaped tent, to take the place of the usual willow poles, which are not available this winter. Set them up as a test, we are cleaned out of portable travelling tents, and I must improvise something if I want to travel, or else carry one of the heavy waterproofed linen tents.

Duffy O'Connor remained over today, repairing his sled and making a tent. Aleatuk returned from Crawford, bringing a note from McConnell stating that Crawford was going on with him today to the O'Connor house and the "North Star" and would bring back the sled and dogs when the job was finished.

Got out some stores for O'Connor.

Collinson Point, Alaska.

March 23 (Mon.).

Wind

E 16.3 sty
E 24 "
E 40 "

Max. Min.

-8 -12
-6 -8
-5 -8.

Strong East wind. Colder. Snow drifting worse in the afternoon. Aiakut and family started west about 9.00 a.m., rigging a sail on their sled. Duffy O'Connor and "Tommy" started west shortly after. Sold dog "Victor" to O'Connor for $15.00. It had been agreed that he could have his choice of Jensen's dogs, but we found that McConnell had taken two of them, and on the assumption that the two he took must have been the best dogs, I let him have one of McConnell's instead.

Goods taken by E.O'Connor

White drill for 1 small tent.
Hard wood for rail and bottom of sled.
1 pr. Snow goggles
1 frying pan. 1 Towline
Cocoa ½ lb. Milk, 2 cans "Diploma"
Sugar 5 lbs. Bacon, 1 slab. 9¾ lb.
Beans, 5 lbs. Salt, 2 lbs.
Prunes 5 lbs. Figs. 5 lbs.
Tea ½ lb. Potass permanganate
Boric acid.

March 24. (Tues.).

Wind:
E 30 sky
Calm
Calm

Max. Min.
-3 -5
+14 +9
+15 +6.

Cloudy. Wind East. Snow still drifting. Warmer. Calm at 1:00 p.m. Air variable in afternoon. Light snow at 6:00 p.m. Clear at 11:00 p.m. Light westerly wind. Aurora bright, shifting flashes, light rosy tint at base.

Spent a good part of day getting stores, &c, and my own business into shape so that I can leave on a hunting trip for two weeks or more. Shall try my old grounds on the Hula-hula River, with a chance of getting Sheep, and the certainty of a number of Ptarmigan.

Have been trying to get away since January 1st, but something has always prevented. Stefansson brought in eighteen half-starved dogs from the west, took our best team to the Mackenzie; then we had to make two long sledtrips to the west of Flaxman Island for whale-meat and blubber to feed up all

Collinson Point, Alaska.

March 24 (Tues.)

the hungry dogs, as we had an excess of dogs over our estimated supply of dogfood, and the dry fish was ordered to be saved for the sled trip which Mr. Stefansson projected. Then I had planned a short trip to the mountains with O'Neill before the regular survey parties could work to advantage east of Demarcation Point, when a letter came from Mr. Stefansson announcing radical changes of plans for all hands, and that he would soon return. McConnell had to be sent to the west with one team for Mr. Jenness, and while the survey parties were anxious to start out, none would care to go until plans for future work, as formerly laid out, were guaranteed in spite of the new plans announced. We couldn't get away, either for work or hunting as Mr. Stefansson was expected any day and the teams had to be kept ready for a start to the east, which prevented hunting trips

March 24. (Tues.)

However the lack of opportunity for hunting did not matter much probably, as none of the natives were able to get more than a few Caribou in the fall, and little if any more until quite recently. None of them ever were able to get more than bare subsistence hunting Mountain Sheep during the short days of mid-winter as sheep are small and never killed in large bunches as Caribou frequently are. I had hoped to get a few specimens, but was never optimistic enough to believe that a Sheep hunting trip during the dark days would produce enough meat to balance the man and dog food taken away from Barrow Camp. Caribou thus winter have been practically negligible. From the standpoint even of protecting the Eskimos' interests, it would hardly be justifiable to attempt to winter a large exploring party on the small remnant of fast disap-

Collinson Point, Alaska

March 24 (Tues).

fearing game of the country, on which they barely eke out an existence at the present time. Yet Mr. Stefansson issues a lengthy order or letter of instructions for (dated March 15, 1910).
the edification of the Expedition, criticizing me severely for not keeping the whole Southern party supplied with abundance of game, citing Dr. Rae in 1854 at Repulse Bay, etc., and "our own experience" here in 1908-1909. In the latter case, the local Eskimos did not shoot enough game to keep themselves alive without assistance anywhere from Herschel Island to Barrow. The band of Eskimos which I hunted with from October, 1908 to April, 1909 had to cross the mountains and go far down the Chandler River well towards the Yukon before we could find Caribou enough to live on, and even then we had to keep following the deer to eke out a precarious existence, had very little time for other work, and had to travel too far to bring back anything but a few

March 24 (Tues.)

small zoological specimens. Some of our dogs died practically of starvation at that. Mr. Stefansson himself started in the fall of 1908 to try to winter with the Colville Eskimos, but got starved out of the country, and had to retreat to Point Barrow, where he spent most of the winter living on the whaling station missionary and government schoolteacher, finding the study of linguistics more easy and practicable that winter than "living on the country." This is not set down as a strict criticism of magazine and newspaper exploration, but in self-defence I can't stand to let a mass of wild statements pass unchallenged, unless I care to tacitly admit the stuff, or sometimes I feel I feel impelled to inject a few non-routine facts about exploration methods into my journals. Under the gag rules of an up-to-date and well-

Collinson Point, Alaska.

March 24 (Tues). organized "scientific" expedition that is about the only way to relieve one's feelings.

Collinson Point, Alaska.

March 25. (Wed.)

Wind
SW 4.2 var.
SE 14.4 "
Calm

Max. Min.
+12 +6
+20 +14
+19 −2.

Very light East wind all day. Packed up some loose stuff and papers in preparation for early start but was delayed by various things. Left Capt. W.O. Nahmens in charge of camp and stores, in charge of tide gauge and Chronometers, and meteorological observations. Mr. Jones will help him when necessary, and work up his winter's notes in the meantime.

Started East at 10:30 A.M. with Mr. D.W Bloss on a hunting trip. Reached Capt. Nahmens' at 1:20 p.m. and took thermometer and some small traps. +16° F. at 1:30 p.m. Reached Crawford's house at mouth of Okpilak River at 7:45 p.m.

Saw a few mouse tracks on snow.

One dog, "Sam Jones" pretty lame, one fore-paw bitten through last week and sores festered. "Bruce" also pretty lame and stiff. Not counting the pup "Donald" we had only three really effective dogs — "Paddy," "Scottie" and "Nellie".

86.

Mouth of Okpilak River
~~Collinson Point~~, Alaska.

March 26 (Thurs).

Hind;
W. 45 stg.
W 34 "
0

Max. Min.
+11 +2
+10 0
+2 −2
(Collinson Pt.)

Gale started from west after midnight and drifted thickly most of the day, nearly filling up the alleyway and half burying the dogs. Spent most of day digging out the alleys, chopping wood etc. Wind moderated gradually in afternoon and snow was scarcely drifting at 6:00 p.m. −2° at 5:00 p.m. Built windbreak of snow blocks around entrance to alleyway, also to windward of stove pipe.

Supplies for Hulahula trip

White Rice 13 lbs.	Blk. Tea 5 lbs.
Hard Bread	Raisins 4 "
Yeast Powder 8 lbs.	Butter 5 lbs.
H.P. Pemmican 16 lbs	Bacon 1 slab (Ca. 6 lbs) (returned 10 lbs).
Dried Potatoes 5 "	1 can Diplomat Milk
Chocolate 2 "	2 " Horlicks " Tablets
Tobloid Tea & Sugar 30 ½	16 lbs Cooked Beans
Sugar 10½ lbs.	
Beans 5 lb.	Dog food-
Salt 1 lb.	Ca. 150 lbs. Dog food
	50 lbs. Rice

Hula-hula River, Alaska.

March 27 (Fri.).

Wind: E 14 hy. W 30 " W 40 "

Max. Min. +5 +2 +24. +10. +10. −5. (Collinson Pt.)

Cloudy. Fairly strong East wind in morning until after 9:00 a.m. Calm at 10:00 a.m. Snow after 12:00 M. Wind Wby S, then SW, S, and finally West. Sudden blizzard after 1:30 p.m.

Snowy Owl — Saw one fly over Crawford's house in morning.

On trail 8:45 a.m., going up the Okpilak River about 2½ miles then striking South across flat tundra 9:50 a.m. Fairly good traveling on tundra, snow not deep and what little there was being packed very hard. From Crawford's house (west side of mouth of Okpilak) bearing of west end of ~~bluff~~ Cotepieuga, the only prominent ridge between coast and foothills, is due South (true), allowing 35° E. variation of Compass. Reached Hula-hula River at 11:45 a.m. after going south nearly parallel with it for some distance.

About 3 miles from its mouth the Okpilak makes a turn, coming more from SE.

Hula-hula River, Alaska.

March 27 (Fri.) Hula-hula is very broad, with no very well defined channel here, meandering among a maze of gravelly bars and low islands and spits. Occasional upcrossings of ice enough to mark the course of the river. Snow falling pretty thickly, so that I could not see more than 200-300 yards ahead. Wind W x S, then SW. South, and finally West, rather gentle. Stopped for a light lunch shortly after 1:00 p.m. sitting down on leeward side of sled the wind blowing slightly from the west. The wind suddenly increased before we had been seated more than a few minutes, so we immediately called off the hunds, relashed the sled, and headed into the wind for 200 yards to the west bank of the river which we could not see until we hit the edge of the tundra. The snow had drifted over and packed level with the bank and snow bank sloped down to the river bed. Dug a hole about 8 feet in diameter

March 27 (Fri.)

sawing out blocks of snow with hand-saw and chopping them with Machete, setting up the blocks to form a wall around the depot. Set up round "Eskimo dome-shaped" tent (tent poles) inside of wall, then put a sled cloth across top of snow house wall, weighting down the cloth with snow blocks. Set up stove, and having carried a small spruce drift-log from the Coast had enough fire for supper and breakfast. Wind increased towards night, so thick that a man could not see ten yards at times and had to brace himself & stand against it. Estimated blowing at least 60 miles per hour, comparing with last winter blizzard at Collinson Pond. Mr. Blue insists that the wind is over eighty miles per hour. + 20° F. at 5:00 p.m. Gale appeared stronger about midnight, and toppled off two or three 50-lb. blocks of snow from leeward corner, releasing one corner

March 27 (Fri.). of the snow-house roof, and causing it to snap and crack like a loose jib tackle block in a gale. As the small dome tent was pretty certain to stand up inside the protection of the snow wall, and as the worst that could happen would be to have to crawl outside and get covered with wet snow in trying to make fast the cover, which would have to be done anyway if the tent blew down, we let the loose end belly up and down and do its worst. Some snow drifted inside wall, which only made the tent more securely anchored.

[Note: Collinson Point anemograth registered wind at 85 miles an hour at one time during this gale.]

At Collinson Point, record states "10:a.m. started to snow. Blowing from west and drifting 2 p.m. During the night between 10 p.m. and 8 a.m. (28th) it blew very hard in gusts."

March 28 (Sat).

Wind.
W 30 sty.
W 22.
W 12. acs.

Max. Min.
+18. −2
+4 0
+5 +3.
(Collinson Pt.)

Strong west wind until noon. Wind moderated by 4:00 p.m. Clear at 5:00 p.m. Light South wind.

Got out on the bars in the afternoon and after about an hour's picking gathered an armful apiece of small willow sticks and roots - enough for cooking supper and breakfast. Saw a small flock of Ptarmigan on the bars, but they were very wild.

Our camp is about 2½ miles northeast of the big Bluff's end, (the western extremity of what is apparently an old glacial moraine running back to the Oppilak hills.

Hula-Hula River, Alaska.

March 29. (Sun.).

Wind
8 a.m. 0
2 p.m. E to SE 4.
8 p.m. S to W. 7.

Max. Min.
+11. 0
+34. +26.
+28. +22.
(Collinson Pt.)

Cloudy. Light south wind. +11° at 7.30 a.m. On trail about 9:00 a.m. Trail fairly good, little glare ice, but snow packed hard in most places. Stopped for lunch from 12:00 to 1.00 p.m. River very flooding two or three miles below the "Lower Fishing Place". Two or three inches of water under a crust of ice; river nearly a mile wide, due to water flooding and spreading out over the bars. Camped at 5:30 p.m. at "Lower Fishing Place", where there are a few small willows, 3-4 ft. high, but in most places only the tops are projecting above the snow drifts. Found a heap of cut brush (flooring of an old tent), enough for our firewood. There is practically no drift willows, or dead willow here, even in fall, and before spring the bars are covered with ice. Snow rather soft here. Light snow after 8 p.m.

Willow Ptarmigan - 12 or 15 seen on bank just before making camp.

Hula-hula River, Alaska.

March 30 (Mon.)

Wind: W 31 sty. 0 W. 20 sty.

Max. Min.
+24. +9.
+16. +9.
+16. +8.
(Collinson)

Cloudy. Quite a gale from west all night, and in morning, so we did not get out early. On trail at 1:00 p.m., and made about 10 miles up stream — rather soft snow and glare ice in places, rather hard to pass, going against a fairly strong East wind in the evening. No game seen.

(30) Photo. #1. and #2 (spoiled?) 3. Mr. Blue and dog team 3-29-1914

(31) 3A. #4. Self " " " " " "

(22) 3A #5. Tent frame, after taking off cover Getting up of same

11-50 - Dull Hazy Snow. 12:30 p.m.

We were overtaken about 2:00 p.m. by Pikalo and his wife, accompanied by the young man Alfred and Tiraglok's 6-7 year-old boy. They had broken camp a short distance below us at 11:00 a.m. I supposed that they had gone up the river long ago, having mistaken Aiakuk's old tracks for Pikalo's. Pikalo had recently come from Stefansson's "Martin Point Ice Camp"

Hula-Hula River, Alaska.

March 30. (Mon.)

He told us that Captain Bernard had injured his head by falling on sled, and had returned to Martin Point. Pikalo said that Bernards forhead was badly cut, but that he was in pretty good shape when Pikalo left. He says that there are now at the Ice Camp, Bernard, Sweeney, Skey and "French Joe" (the cook). McConnell and Crawford had gone out with the ice party.

Snowy Owl - one seen on an upland bench in the foothills, and Alfred went after it with rifle, but could not get near.

March 31. (Tues).

Wind.
W. 9 sty.
SE 14.5 var.
— — —

Max.	Min.
+15	+12
+36.	+19.
+20. (Collinson Point)	+12.

Clear. Light East wind all day. Strong South wind in evening. +11° at 7.30 a.m. On trail 8:20 a.m. Made pretty good time, mostly over glare ice. Lunch 12–1 p.m. Camped at the well-known fishing place Arrga yu-Kuk-shuk ō-vik (old Man's place). Camped on west side, opposite last bluff, near first open water rapids. Rabbits hauled into the brush on east side across from us. Very little wood on either side. Some water flooding on ice below the fishing place.

Red Fox – one seen on hillside in morning. He watched us for a little while, about 500 yds. then ran over hills to west.

Polarmie – fresh tracks seen.

Ravens – three or four seen today.

Ptarmigan – none seen, and no recent signs, although Alfred made a wide detour over the hills on west side of the river, parallel with our course.

Hula-hula River, Alaska.

April 1. (Wed.) +13° at 8:00 a.m. +1° at 5:00 p.m. Cloudy a.m. Strong west wind. Snow drifting a little. Clear at noon. Slight snow in evening and calm. Hunting all morning up large creek to east (creek from mouth course about east to high bluff, then south or S.E. Willows along this creek but no game. Very little dry wood for fuel.

Wind.
W 32.
W. 15.
0.

Max. Min.
+20 −2
+2 +3
−1 −8.
(Collinson Pt.)

Spermophile — fresh tracks (today's), on snow along creek; hole open.

Mouse — tracks on snow.

Fox — a few tracks.

Raven — one seen.

Heard small birds (Redpolls?) twittering overhead early in the morning.

Mr. Blue went up creek to west, but got nothing, except a big pack load of willow wood. Big willows on creek, as thick as a man's arm, 10–15 ft. high; many willows upright (dead) among the live willows.

Willow Ptarmigan — Blue saw a flock of about one hundred up the creek.

April 1. (Wed.)

but they were very wild. Pikalo shot ten with .22 rifle.

Some of the Eskimos were fishing with "nitsit" (small barbless hook) today, but caught nothing. Saw a few small fish dart out from under edge of ice into deeper water.

Had a bad headache all day - back of the eyes, probably due to eye strain from snow glare.

April. 2. (Thurs.)

Wind.
E 20 sty
Light airs
do. Snow 11 3½

Max. Min.
-2 -7
+18 +16.
+26. +2.

Rather warm. Calm. Dull hazy sunshine. Hunted up creek & west among the big willows.

Rock Ptarmigan. Killed two cock individuals (males) while going up the creek. Started up a flock of about 100 near base of hills. They flew up and kept running along the bare hillside above me, and it was hard to get near them. Shot three and then they flew down the hill near the river. Went down about one hour later

Hula-hula River, Alaska.

April 2 (Thurs). where Blue and Pitkalo chased them around over the tundra. Some Willow Ptarmigan scattered here and there, and I killed two. Total 7. Blue shot 8, and Pitkalo 28 Ptarmigan Pholos.

Vest Pocket Anastigmat.

(28) ⅛. "Ptarmigan Creek" - west side of Hula-hula, at Angayukuksheuk ford, looking west. 11 - 1/50 - Bright sun. 9:20 a.m.

(29) ½ V.P. "Ptarmigan Creek" - large willows on creek. 11 - 1/50 - B.S. 10:15 a.m.

(30) ½ V.P. do. Close to above.

(23) 3A. ⅛. Sandstone, overlain by clouds and gravel (glacial drift). Below Angayukuksheuk Fishing Place, Hula-hula River. Looking north 22 - 1/10 - Dull hazy sun. 2:30 p.m.

(24) 3A. ⅛. do. (about 100 yds. further east). looking east.

(25) 3A. ⅛. Group of Cottonwoods (Populus), on hillside, near open springs

April 20 (Thurs.) the only trees, except willows — on Hula-hula. The largest Cottonwoods, near base of hill are 12-15 ft. high, the largest 13½ inches in Circumference near base. None dead.

16 — ⅕ — D. H. S. 3:00 p.m.

(26) 31. ° 7. do. Thicket of small Cottonwood saplings on top of bluff, fringed with willows.

(27) 34. ° 10. Camp at Fishing Place. Angayu-Kukshukpuk.

11 — ⅘ — Cloudy. 5:00 p.m.

Notes from Dan. Sweeney, who has hunted and prospected on most of the rivers from Herschel Island West.

Trees. Spruce on Canon River (Key Point River) { Rabbit or Aichilik and Kongukut. None west of Kongukut — never Palowe or Hula-hula or Canning (Kuguruk)

" " Herschel Island River — none on rivers west of there.

Cottonwoods and willow on Aichilik (west of Herschel Island, Kongukut (Jay Reef), on Jago and Hula-hula. No Cottonwoods west of Hula-hula. None on Okpilak. Big willows on Canning. Fair willows on Sharavanaktok (Sawanneckto)

Hula-Hula River, Alaska.

April 3. (Fri.)

Wind.
W 30 stly.
W 25 "
Lt. 6 airs

Max. Min.
+28 +22
+22 +3.
+13 +3.
(Collinson Pt.)

Strong wind from west, moderating at intervals, but frequent strong gusts, during flurries of snow. + 30° at 10:00 a.m.

Decided to go some distance into the mountains, in spite of windy weather. On track 11:20 a.m. Rather difficult following narrow ice edges around open holes above fishing place. Mostly glare ice above, down which wind swept with great force, so that we could only move ahead during lulls. Sled pulling up hill on glare ice, so that dogs could get no footing and kept slipping and sliding all around.

Mr. Blue found the Alpine Ice-Creepers (sandals with spikes) exceedingly useful, as in many places he had to push the sled over glassy places by his own strength. Going ahead, with bare boot-soles, I could often not stand up, even with aid of ironpointed bamboo staff. Frequently fell down or slid astern. River enters mountains directly above Angayukuktukutovik, with sandal sharp

April 3 (Fri.). short bends through narrow rocky canyons. Occasional stretches of snow in places. No decent flooded spaces seen today. Willows scarce along here. After bucking ahead for about five miles we camped about 3:00 p.m. finding quite a bit of willow drift on a long bar. Pikalo, with lighter sled had gone ahead, and stopped here, picking up the best of the wood. Got slight shelter from the wind here behind a low bench hill. Wind coming from south, having a different slant at every new bend of the river or gap in the mountains. In here, looking from the inside (to the north), in fact on all sides here, the hills are practically bare of snow.

(52) Plot 3N. #1. Mountains. Hula-hula River. About 4 miles above Entrance. Looking North. Slopes denuded of snow. 11-1/10 - Bright Sun. 10:00 p.m.

Cached at F.P. dogfood, rice, and 9 Hamnigan. Set 4 traps.

Hula-hula River. Alaska.

April 4 (Sat.).

Wind:
E. 19 Sky
W 19 "
W. 34

Max. Min.
+6 0
+34. +10.
+29. +9.
(Collinson Pt.)

Strong wind still blowing (from South) at 5–6 a.m. Wind lowered about 11 a.m. to light breeze. Calm in evening.

+42° (in sun) at 11:20 a.m. +28° at 5 p.m.

Our trail 11:47 a.m. and reached Katak Creek 4:00 p.m. Camped on bar south of mouth of creek. Considerable water 1 to 4 inches, with crust of young ice, running from one side of river to the other for about two miles below Katak, so that we had to wade and drag sled through the crust which seldom was strong enough to support sled.

Saw Hawk (at distance, over mountain top, pursued by small birds.

Willow Ptarmigan — Saw large flock in willows, but they were very wild.

Mountain Sheep — Saw a number of fresh bones around Akatuk's February camp. He killed Eight Sheep here.

Saw a little water running on ice (east side of river), two or three miles above our old camp.

April 4 (Sat.)

General course of river sighted from Katak to Angayukuksukpuk southward E. 15° true. (allow 35° E. variation)

Going up river from Apr. 3 camp. From large bend above camp, to low bench on west bank E. 170° ca. 3 miles.

To bend at Creek. E. 210° ca. "

To Katak Creek (at beginning of big mountains on west side. E. 190° ca. 2 miles.

Mountains lower on both sides of the river along course today, than for the first few miles after leaving Angayukuksukpuk, and considerably lower than the mountains on both sides of river south of Katak Creek.

Katak creek, from my observations in March, 1909, comes in at nearly right angles to Hula-hula from the west, soon narrows, passing through some very deep box cañons, and running north, parallel with the Hula-hula for several miles, separated by another ridge or two from the Tolimuk creeks.

Yula-kula River, Alaska.

April 5. (Sun).

Wind.

0

E & S 24. Gusts 0.

Max. Min.

+26 +8

+27. +9

+30 +8.

(Collinson Pt.

South wind, blowing a gale at 6:00 a.m. Cloudy. +32½° at noon. Set up tent last night with door to south, and overlap from north side. Wind got under and started things to flapping. Got outside and tried to batten down corners, but sheet got loose and off came the whole cover. This finally induced Blue to crawl out and we shifted cover the other way around, anchoring edges down with a few more hundredweight of stones. The poles are too flexible, and keeping on bending inwards in a strong wind, causes cover to flap considerable. Wind still stronger in evening. Cooked dog food inside of tent, as wind was too strong for open fire of small sticks blowing away the embers. Pikalo arrived about noon, sledding over bare ground across bench on west side. Water on river below us, and they (the natives) have nothing but deer-skin winter boots, and no sealskins to make water boots.

April 6. (Mon.)

Wind.

SW 14.5 gusts
SW 10 var.
W 20.

Max. Min.

+30 +10.
+33 +30
+30. +26.
(Collinson Pt.)

Cloudy morning. Gale from south kept up all night. Moderated and died down during forenoon. Heavy snowfall from 3:00 to 5:00 p.m. Clear after 7:00 p.m. Wind southerly, variable.
+32° at 8:00 a.m. +23° at 8:00 p.m.

Spent some time chasing Ptarmigan in the morning, after loading sled and killed 7. On trail 11:20 a.m. Surface water mostly crusted over, enough to tear up sled in most places.

From mouth of Katak, to trail E. 210°
ca. ½ mile. Shiko, a high ice terraced creek or spring, on mountainside, east bank, a little above our camp, across river.

River flooding for about 1 mile.

To Fishing Place, trail in general E.S.E
ca. 5 miles.

From Upper Fishing Place (our old "Sheephorn Camp") ice terraced creek on each side just above Fishing Place.
E. 160° to glacier terrace 2 miles.

Hula-hula River. Alaska.

April 6. (Mon.)

E. ca. 180° (S. true) ca. 5 miles to Pattarik (place where two large creeks enter river, one on each side of river.

Phot. 3A. #2. Glacier Creek. Upper Fishing Place. Right bank (east side) of Hula-hula River.

River flooding for about a mile above the Fishing Place. Several stretches of open water several feet wide and from one to ten yards long in Fishing Place Canon. Deepest water seen was about four feet deep. Saw a few small fish, less than 6 in. long, but no larger ones. The Eskimos tell me that there are no fish in the river above this point in winter.

River bed broad, but very stony below Pattarik, and channel difficult to follow. Camped about 6:00 p.m. at Pattarik, (a little below regular place) as dogs were completely played out.

Stone cache here, with willow tripod on top, granite ware pot, and red calico dress on river bank.

April 6 (Mon.)

as a marker. Probably belongs to Kunagnaina, who wound up this river last October, intending to cross the mountains. Wood rather scarce here, willows all livi, and we have to search over several acres of gravel bars to get enough wood for a day.

Willow Ptarmigan - Saw flock at Katak in the morning. Pikalo shot one. I scared up the flock of about thirty and they flew to east side of river. Blue went after them and they flew before he got within range. The flock came over me and I dropped two. Followed them up creek, where they scattered over the tundra and I killed ~~three~~ five more after an hours chase. One male, shot clean, and preserved, had nice brown feather on throat. Saw another flock of about 200 in willows about 4:00 p.m. East side of river, about 5 miles below Puttarik. Blue and I went after them but they were very wild and scattered over tundra. Bob fired at the same bird and killed him.

Hula-hula River, Alaska.

April 7. (Tues.)

Wind.
W 0 Stg.
E 2
E 14.

Max. Min
+31 +11
+29 +16
+15 +14
(Collinson Pt.)

Clear a.m. early, but later became rather hazy on mountain tops.

Went hunting up creek coming down from the East. Its general course for last 5 miles is west, with numerous short sharp angles, through several small box canons. Fairly large willows all along the course of the creek. About 5 miles up the creek forks, one branch coming from a little north of East, and the very high, bleak, deeply snow covered mountains west of the Okpilak. The other branch, known as Kangitkiak, comes from the SE. and has a pretty heavy growth of large willows, some 12-15 high, and straight and slender so that they could be used for tent willows. Up this creek I killed my first Sheep in November, 1908. Saw no Sheep today, but saw what appeared to be old nearly obscured Sheep tracks crossing the bed of creek about 3 miles up from the Hula-hula River.

April 7. (Tues.)

There is enough dead, standing willow along this creek so that one could camp every 200-300 yards all along this creek from the Hula-Hula. Bed of creek very rough and stony. Numerous boulders, and snow deep and soft, so that it was very slow going up creek even on snowshoes. Broke one snowshoe near the middle.

Rock Ptarmigan - Saw two on bench hill near mouth of creek. Flock of about 20 flew up from willows in creek bed, alighted on hillside then flew up creek. Later flushed a larger flock, which flew up on hillside, then down creek. Found another flock further up creek and chased them far up into the mountains. Saw two flocks again on the way down creek and shot one. They were pretty wild, but would fly only a quarter of a mile or so at a time. Finally they flew over me and up creek again. Shot one &

Hula-Hula River, Alaska-

April 7. (Tues.)

Rock Ptarmigan — Mr. Blue went up creek on west side of river — a smaller, more rocky creek, with few willows. He saw one wild flock near mouth of creek.

Birds Nests — Saw a nest which looked like a Phoebe's nest (Sayornis) in a little niche of rock wall of canon. Also two or three Robins nests in willows (mud-walled nests.

April 8. (Wed.)

Hazy day. Light fog in morning. Warm. Snow melting fast. Practically all the snow (ca. 2 inches) which fell day before yesterday, has disappeared.

Wind.
Light N. airs.
NE 14 var.
E. 14.5 "

Max. Min.
+31 +28
+31. +16.
+25 +10.
(Collinson Pt.)

Phot. V.P.

32 *5. Camp at Paktarik. Hula-hula R. 11-50- Dull sun 3.30 p.m.

33 *6. Looking down Hula-hula R. from Paktarik. do

34 *7. Dogs at camp do.
*8. Looking up river to main fork near Head of Hula-hula. from Paktarik. do

35 Too hazy and foggy in morning for Sheep-hunting, and no Ptarmigan seen or heard.

Took sled down river and the two of us picked up a pretty respectable load of wood on about two miles of gravel bars.

Hula-Hula River, Alaska.

April 9. (Thurs).

Wind=
SW 0 Lt. airs.
SW 12
W 42 (high drift) Blizzard.

Max.	Min.
+30	+20.
+45	+34.
+38.	+16. (Collinson Pt.)

Cloudy, foggy morning. Heavy snowfall in afternoon. Strong North wind. Sky cleared a little in evening and wind moderated.

Pikalo's sled arrived about 4:00 p.m. all the people rather cold and wet. They reported considerable water on the ice at the Fishing Place, which they had to wade through in their deerskin boots.

Salmon Trout— Pikalo's people fished with hook a little while at Upper Fishing Place, but caught only two small fish ca. 8 in. long. He calls them Angayu Kuk'shuk, and says they are not the same species (not young specimens) of Salmon Trout (Salvelinus malma) which he calls Ekallak'pik. Put the two fishes into a can of water to freeze up for specimens. I am quite certain, however, that they are young Salmon Trout.

Hula-hula River, Alaska.

April 10. (Fri.).

Wind.
W 30 stg.
W 13
0.

Max. Min:
-1. -8.
-3. -6
-2. -16.
(Collinson Pt.)

Cloudy in early morning. Strong north wind which died down about 8:00 a.m. Clear sunshine all the rest of the day. Strong N. wind p.m. +5° at 9:00 a.m. +3° at 10:00 a.m. -6° at 5:00 p.m. Dogs broke into sled and ate up both prepared skins and bodies of two Ptarmigan which I skinned yesterday. (Nos 154-155)

Hunted up creek to west and SW ca. 5 miles beyond willow line, into very rugged, barren, jagged country. Saw no signs of life except one old Sheep track. Blue wind home before I did and saw a small flock of Rock Ptarmigan just inside the mountains above the mouth of creek. Raw wind from north to-day coming down the creek, which felt cold, but unthinkingly I let a large spot on my cheek freeze solid before I got home.

Mountain Sheep - Pikalo came over in evening. Said he saw ten or more Sheep today in high mountains

Hula-hula River, Alaska-

April 10 (Fri.) up Kanyiksiak Creek on the East side of the River, ~~and killed three~~ Says there were no large rams in the bunch. He killed me adult female which he skinned for me in scientific style. The other two were small young sheep, with stubby horns, which he thought I would not want, so butchered off the skins in Eskimo style. Pikalo brought me over one shoulder of meat.

Hula-Hula River, Alaska.

April 11. (Sat.)

Foggy, hazy all forenoon. Strong north wind. Clear in evening. Wind south at 11:00 p.m.

−6° at 10:00 a.m. −22° at 11:00 p.m.

Wind.

0

West 4

0.

Mountain Sheep: Pitalo went up the creek and hauled down one Sheep. Alfred went up river two or three miles, then ascended mountains on the west side. He saw four Sheep which he was unable to approach.

Max. Min.

Temp. of air.

8 a.m. −19

2 p.m. −7

8 p.m. −26.

(Collinson R.).

Hula-hula River, Alaska.

+5° at 11:30 a.m. -18° at 10:5 p.m. Wind S. in morning

April 12 (Sun.) Clear. Very light air stirring from the north all day. Cold in morning. Spent some time relashing a snowshoe which broke for a second time. Have only soft willow to make a splice – dry willow is too brittle and green willow too elastic. Blue wind up river and I started down river. Pitkalo hauling meat from Kangiksiak Creek – the most likely Sheep ground in this locality.

Wind-
0 Clear
0 "
0 "

Max. Min.
-23. -25
-8. -18
-10. -32
(Collinson Point).

Went down river about five miles to place where there is a comparatively low saddle-back slope, a little south of the ice-terraced creek about two miles above the "Upper Fishing Place". The thickly willowed "Ptarmigan Creek" [Fishing Place] [better Boulder Creek] spreads out broadly on the wide bench terrace at foot of mountains. Lower part of bed very rough, through heaped up lines of rounded stones and boulders running half way up side of mountains. Upper half of mountain about 45° slope slightly terraced and pretty evenly

April 12 (Sun.)

snow-covered. Used snowshoes a little going up, and found them useful in hurrying downhill, as they saved many a plunge knee-deep into soft spots between stones. Top of this saddle rounded, covered with thin loose fragments gray (sandstone?). The creek east of fishing place runs through deep gorge behind mountain and heads behind the saddle. The mountains to east are higher, and very rough and jagged. The top of saddle overlooks the top of mountains near the west side of Hula-hula, although there are some higher hills behind to the west. From the river the mountains on west side appear to be a series of pointed-topped precipitous rock bluffs, with occasional steep gullies. Looking over the tops of them from higher elevation on east bank they are seen to be leveled off on the top for a mile or two back, from south to north,

Hula-hula River, Alaska.

April 12 (Sun.). giving a narrow plateau or mesa formation, horizontal, and parallel with the river; gently rising on western side in a slight terrace where it merges into higher ridge formation to the west.

Photos. Vest Pocket.

[39] *4. Boulder Creek, east side of Hula-hula, above Glacier Creek, about half way up the creek. 11-50-B.S. 3:00 p.m.

[40] *5. Mountains, looking east from summit of saddle above Boulder Creek. 11-50-B.S. 6:00 p.m.

[41] *6. do.

[42] *7. Mountains, west side of Hula-hula. From summit of saddle at head of Boulder Creek. To show mesa formation.

[43] *8. Mountains. Looking north from summit of saddle. East side of Hula-hula.

Redpolls - heard flock flying over willows near mouth of creek, but could not see them.

Hula-Hula River. Alaska.

April 12 (Sun.) Willow Ptarmigan - Saw no birds on way up the mountain, although tracks were numerous on lower portion of Boulder Creek. Found a flock of perhaps 200 settling for the night in large willows at foot of creek about 8:00 p.m. Scared some of them up, but they only flew three or four hundred yards and settled down again in willow thickets. Reached camp 10:00 p.m.

Spermophile - Citellus parryi. Saw fresh (today's) tracks running into an open hole about half way up the mountain side.

Wolverine - Saw fresh tracks of a rather small wolverine on river and running up Boulder Creek. Saw wolverine tracks near camp the first day, and dogs bayed loudly at something north of camp the other night, and we found fresh wolverine tracks within 200 yards of camp the next morning. Pikalo returned to camp

April 12 (Sun.)

in the evening and reported that a wolverine had torn up the Sheep skin he had prepared for me, and carried off the head of the same animal, as well as the head of one of the other sheep he had killed. They had boiled the remaining Sheep's head, thinking I would not want it, so it seemed that we shall have to go back without even a skull of Ovis dalli.

Mountain Sheep.— Pikalo lost skins and heads by wolverine. [See note on wolverine ante.] Mr. Blue went up the river 4–5 miles and climbed the mountains. Said he saw a bunch of about ten Sheep on high mountain to the eastward, just visible when they were moving, through 6x Zeiss binoculars. He could figure out no way of approaching them, and was not inclined to go after them, over several miles of rough mountains.

Near head of Boulder Creek saw 1 fresh Sheep track going west. Also near top of saddle 7–8 old tracks. Slopes well grassed and mossed in spots here.

Hula-Hula River, Alaska

April 12 (Sun.). Barren Ground Caribou — Found a very old antler about half way up the mountain side, near head of Boulder Creek. Natives have told me before that Caribou never enter the mountains inside of Angayukuk-shukowik, or indeed into any of the mountain rivers in this region, except Herschel Island river, where they cross the mountains frequently. Pikalo says now that the Caribou came into the mountains here a long time ago — which is self-evident.

In regard to the recent Caribou killing near Demarcation Point, Pikalo says that there were great numbers, and Iglue and another Eskimo killed 67 in one day. The Nunatamis (Alaskans) had made preparations for a general round-up, but the "Kogmollicks" (Herschel Island and Mackenzie River Eskimos) got too impatient and spoiled the game, so that the Caribou were frightened away and few if any were killed. Herds not re-located at last reports.

Hula-hula River, Alaska.

April 13. (Mon.)

Wind.

0

0 (Westerly airs.)

0 "

Max. Min.

-16 -25

+10. -9

0 -20.

(Collinson Pt.)

Clear. Wind southerly in forenoon, north in afternoon. Cold. +10° at 12 m.

On trail 12:00 M. Passed Boulder Creek 1:15 p.m. Saw no Ptarmigan. Little water on ice above Fishing Place, and much less below, than when we came up. Crunched through about half a mile of thin ice with a little water below. Water running over the ice in places for about a mile, but keeping to the higher places of the uneven ice, we did not go through much water. Reached Katak at 3:00 p.m. Some thin ice over a little water above here, but not much. Pikalo had gone up creek about ½ mile, and we hauled in about 50 yards behind bank to get more shelter than when we camped here before. Pikalo gave me one saddle of Sheep meat.

Photo 3A.

(54) #3. Ice hummocks (pressure upheaving) in river. 11-50-B. S. 2:30 p.m.

Hauled dog "Paddy" on sled today.

Hula-hula River, Alaska.

April 14 (Tues.) Clear. North wind. + 9° at 11:00 a.m. Air cold.

Wind.
W 12
W 8
W 0.

Max. Min.
-12 -15
+2 -6.
-6. -18. (Jellinson Pk.)

Out trail 10:35 a.m. Passed our old camp of April 3rd at 1:35 a.m. Reached Angayukuksukvik Fishing place and took up cache and traps. Wolverine had not been near, although a Fox had nearly stepped into one trap. As there was little wood here, near our old camp, we decided to go further on and camp in Ptarmigan Creek, on west side of river. Pikalo had gone ahead and camped in creek on east side of river. Mountain sides mostly bare from Katak down river, and foothills at Angayukuksuk are nearly bare of snow. Hauled dog on sled today.

Rock Ptarmigan - Saw one on rocky cliff at side of river on way down. Pikalo had seen several and killed two or three on way down today. None seen at Angayukuksukvik, although hillsides Ptarmigan were numerous there.

Hula-hula River, Alaska.

April 14 (Tues.)

Willow Ptarmigan.

Hauled up across tundra about 300 yds and prepared to make camp at edge of big willows. Saw large flocks Ptarmigan up creek on tundra (hundreds of them), apparently all Willow Ptarmigan. Left sled stand and everybody went after them. They seemed to get tamer the more they were shot at, apparently the survivors after each shot thought that there had been no damage done, and the dead ones told no tales. At first they were a little wild. I killed seven and wounded two more at a single shot (both of latter secured), and as Blue Pikolo and Alfred had the flock well in hand, I started pitching camp, killing three stragglers which came down near the sled - total 11 for me. Blue killed 27, twelve of them with 22 rifle. He could crawl along behind a flock, keeping about 60 yards away, and pick them off one by one, as they did not seem to mind the report of a 22. Alfred (cutaway)

April 14 (Tues.) also killed 2 Ptarmigan with his 22. Pikalo was setting out snares in the bushes, and took out 2 Ptarmigan before he went home. Set up my small net, but it does not hang very well without backing. About 8:00 p.m. a hundred or more Ptarmigan alighted in creek about 200 yards below where I was setting up my net, but I was careful not to disturb them.

V.P. Kinder. 44 & 45 #1. Mts. N. of Kelsey (W. Side). 11-1/30-85 Harm.
#2. Dog town on river.

April 15. (Wed.) Hazy sun. Strong SW wind. Snow drifting. Heard two or three Willow Ptarmigan. Heard two or three miles up creek in morning. Nothing in net. Shot one straggler near camp. Alfred found the bunch and shot 21 in afternoon. Blue shot two. Pikalo caught two in snares, and gave me one clean specimen.

Wind.
W 39 gusty
W 34 "
W 16 "

Max. Min.
-5.5 -5
+7 +2
+9 0

Huta-Huta River, Alaska.

April 16. (Thurs).

Hazy sun, cloudy part of the time. Strong SW wind in morning. Calm p.m. light North wind after 4:00 p.m.

Wind

N. 30 gusty
W. 4/5 stg
SE-0

Max.	Min.
0	-11.
-8	-9.
-8	-19.

(Collinson Pt.)

The dog "Paddy", Bluc's oldest dog, father of Bruce, "Scotty" and "Donald" died today. He had been sick since we started up river from Kaiatt, and had to be led. At Pakturik he rested several days, but one fore leg was swollen from shoulder to elbow to double its normal size, and was painful on touching it. I opened it with needle but nothing came out but thick dark red blood. Two days later Bluc opened it further and about a pint of serum or pus came out (he said). This reduced swelling on that side, but the other shoulder began to swell up in a similar manner, so that he was unable to walk. He would eat about one-fourth of his normal ration. (We have been feeding Esalmon with a little tallow to each dog when unable to cook. Otherwise 3 or 4 large cups of rice, ca. ½ lb. tallow

April 16. (Thurs.)

and a little scrap of Salmon or "home canned dogfood", a perhaps a few Ptarmigan heads, feet, wings and intestines for flavoring the soup pot. We carried him on the sled for the last two days travel as he was unable to walk, in fact could hardly stand up alone. The last ~~two~~ four nights he has been moaning very often, as if in great pain. Blue says that "Paddy" is a very stubborn dog, and never moaned or whined even when beaten severely for his misdeeds. "Paddy" and the bitch "Nellie" have been inseperable for years. If separated, one will inevitably break bonds and hunt up the other one. She would never take notice of other dogs, and was never satisfied unless Paddy was around. While he was sick and kept away from the other dogs, Nellie never went far from his side. After his death, she seemed to understand situation, and left him

Hula-hula River, Alaska.

April 16. (Thurs.) Willow Ptarmigan. Ptarmigan came into the willows above camp in the afternoon. Soon chased them out of the brush and up and down across the tundra. They had evidently been flying low during the forenoon, and were anxious to feed, and would seldom fly more than 300-400 yards. Chased them up on the bench hills, then down over the tundra to the river and back again. They kept trying to escape by running, only occasionally a belated straggler on the rear end would fly a few dozen yards to catch up with the main bunch. Ordinarily one can approach nearer by crawling, but today they sprinted faster than I can crawl, so had the best success by walking as fast as possible after the bunch, chasing them like a flock of chickens, and on every occasion shooting the nearest one, picking him up and then after the rear guard again. They would seldom fly and

Hula-hula River, Alaska.

April 16 (Thurs.) I got very few wing shots within range. Shot 27 Willow Ptarmigan. Blue shot 12, and snared one. Pitalo shot 7 and snared one, giving the latter (a clean specimen) to me. Two males out of the bunch had brown collars. All of the males have heavy pin feathers on heads and necks, but still hidden by old white winter feathers. Kept four clean specimens for skinning.

156. ♂ L. l. lagopus.

157. ♂ " " "

158. ♂ " " "

159. ♂ " " "

Snow Bunting – Plectrophenax nivalis. Saw one, in winter plumage, feeding on weed seeds in midst of clumps of willows – the 1st of season.

Duck Hawk – Saw one make an unsuccessful swoop down at flock of Plumages.

Alaska Jay – Perisoreus canadensis fumifrons. Shot one in willows near camp. The only seen on the trip.

#165. ♀ P. c. fumifrons.

Hula-Hula River, Alaska.

April 17. (Fri.)

Clear. Calm. +13° at 8:00 a.m. +18° at 10:00 a.m. +16° at 8:00 p.m. Cloudy and wind fairly strong from west.

Wind.

SE 0
E 0
E6N 0.

Max. Min.
-8 -20
+11. -10.5
+4. +1.
(Collinson Point).

Willow Ptarmigan — Heard Ptarmigan calling in the early morning. About 9:00 a.m. Alfred located them in small creek about a mile to the eastward. The tundra is about half bare, so that with the glasses one can spot up Ptarmigan a long distance. I went part way towards them, then sat down to wait as the birds were gradually working my way. Soon they alighted near me and I killed three. They went into the willows on creek and I got one more then they flew up on high hillside, and began feeding, running rapidly along. I could barely overtake them, but they would not fly very far, and I kept following them back and forth, killing 17 more within an hour — total 22. As I fired my last shell, Blue came up and started in, but the Ptarmigan were

April 17 (Fri.). evidently tired of the game, and he only killed 8. At one time, I got within 35-40 yards of a scattered bunch, and shot six singles straight from the 16-ga. pump-gun, without moving from my tracks, before the bunch flew, and then only went about 50 yards. In the afternoon, with glasses, I saw a large flock feeding on low mesa tundra across river (East side) about 4:30 p.m. and went after them, taking only 15 shells. They were wild and I missed a shot. They flew into willows near Pikalo's camp, and then ran out on tundra on other side where I killed 5. Got a 20-ga. shell jammed in 16-ga. chamber and had to go back to Pikalo's camp to ram it out. Came back to willow thicket where the Ptarmigan had been chased by the small boy with his toy bow and arrow, and shot 8 more. Pikalo also shot a few with .22 rifle, but is going easy on them, as he does not need many

April 17. (Fri.)

to keep going, and his ammunition is getting short. He says that in a short time he is going to cross over to the Sulenchit River, where there are more willows and more birds.

Total today- R.M.G. 35, Blue 8. = 43

Ptarmigan were more scattered this afternoon. Saw a number of single males scattered out on tundra, calling; also two or three pairs (but whether male and female I could not tell.- Several ♂ Ptarmigan killed today had brown streaked collars. Kept ♂ clean specimens for skinning.

*160. ♂
*161. ♂
*162 ♂
*163 ♂
*164. ♂

Duck Hawk- Saw a Duck Hawk hovering over and swooping down near a flock of Ptarmigan crouching in brush, but he did not make a swoop. This may account for Ptarmigan's hesitation to fly later

Hula-hula River, Alaska.

April 18. (Sat.)

Clear at 8:00 a.m. and clear until after 2 p.m. Light N. wind. +45° (in sun) at 10:00 a.m. +34° (in shade) at 11:00 a.m. +5° at 9:00 p.m. Light snow 10 p.m.

Wind.
E 7 St'g
E 6
E 0.

On trail, left Angayukuksukovik 11:30 a.m., delayed for half an hour & shot 8 Ptarmigan about a mile below Camp. Fairly good travelling for first part of day, but more soft snow as we got further down the River. Camped 3-4 p.m. (Lunch) 7:15 p.m. about 5-7 miles above "Lower Fishing Place". No wood except a few sticks which we picked up during last two hours of travelling. Made about 18 miles from Angayukuksukovik.

Max.	Min.
+4	+2
+15	+9
+12	+4

(Collinson Pt.)

Bearings. 1:00 p.m. Back sight to Angayukuksukovik Bluff. E. 167° 5 miles

To next bend north. Bearing 30° E. 5 mi.

E. 40° 1 mile
E. 340° 1 mile.
E. 30° ½ "
E. 340° ½ " to Old Camp (of March 30).
E. 30° 3 "
E. 300° ½ "
E. 18° 1 mile

Hula-hula River, Alaska.

April 18. (Sat.) Took three pictures before leaving Angayukuksukokvik. 3A. Camera.

(56) #5. Mountains at Angayukuksukokvik ~~Entrance~~ Exit of Hula-hula R. from Wn. (East side of River). 11 - 1/50 - B.S. 11:15 a.m.

(57) #6. do. Mountains on West side of Hula-hula River. 11 - 1/50 - B.S. 11:15 a.m.

(58) #7. Hula-hula, east side, looking from about 100 ft. elevation, about 1/2 mile from East bank. 11 - 1/50 - B.S. 11:15 a.m.

(59) #8. Ptarmigan Creek, West side of Hula-hula River, hills, looking up creek to west. 11 - 1/50 - B.S. 11:15 a.m.

Willow Ptarmigan. Saw a large flock in small willows on bar. They ran up on tundra, and we followed them up. Killed 5, and Blue 3. Saw another flock in willows about ten miles further down, but they were too wild, and flew off up-river again.

April 18 (Sat.).

Spermophiles - saw several out at various places along the bank where sand and tundra are exposed. Whenever the dogs saw or scented the squirrels they would immediately hoist up and pull their hardest! We are doing pretty well with only five dogs, counting "Donald" (6-mo-old pup). and "Sam Jones" who is rather lame.

Hula-hula River, Alaska

April 19 (Sun.)

Clear light easterly wind, increasing in afternoon.

Photo. V-P: [46] *3. Breaking Camp. Hula-hula R.

11 - 1/50 - B.S. 9:00 a.m.

[47] *4. do.

On trail 9:45 a.m.

E. 330° 1/4 miles

E. 40° 3 miles to Lower Fishing Place.

From Lower Fishing Place, river spreads out making a slight bend, swinging angle out about 2-3 miles to NW then back to NE, making line from Fishing Place to "Big Half-way" bluff about North and South true.

Lunch at Fishing Place, using scrapes of wood from old camp to melt snow water 12:45 to 2:45 p.m.

On trail again 2:45 p.m. Some water on ice below fishing place, on East side of river. Good travelling for 4-5 miles, then struck soft snow on ice and hard pulling. Tried first on river, then on tundra edge of bank — about equally bad. Camped 6:30 p.m. on tundra, West bank, about

Wind

W. 0.
0.
0.

Max. Min.

+12 +10
+18. +12.
+15. -12
(Collinson Pt.)

Hula-hula River, Alaska.

April 19 (Sun.) Ten miles from point of big "half way bluff. No wood except an armful of willow drift which I had picked up near fishing place at noon but we made tea and boiled pot containing three Ptarmigan and 1½ cups of rice, and had enough wood left to just warm up the stew pot and tea pot for breakfast.

No signs of Ptarmigan seen today.

Arctic Fox - fresh tracks seen

Wolverine - one track seen

Spermophile - two or three seen along bank of river above the Fishing Place in forenoon.

Wind rather strong from east in afternoon, and rather raw.

Hula-hula River, Alaska.

April 20. (Mon.).

Clear. Light East wind until 6 p.m. Clear, calm evening. Cold. -7° at 9:00 a.m.

On trail 9:35 a.m. Followed course of river channels as best we could by guide of ice hummocks here and there. Very slow travelling, sinking in over our ankles in soft, slightly crusted snow in most places. Occasional patches of smooth ice in vicinity of hummocks. Used snowshoes part of the time. Reached End of big bluff at 1:10 p.m. and found enough small willow sticks to make a fire. Saved a small bundle which I had gathered here and there, in case we should not reach the coast by night. We could walk the distance with little difficulty, but can not depend on the dogs holding out. They have their own ideas about what constitutes the length of a working day, more or less in sympathy with Mr. Blue's opinion at the time. However, they are doing good work today, and

Wind	Max.	Min.
ENE 7 St.	-12	-14
ENE 9 "	+5	0
0.	0	-18
	(Collinson Pt.)	

April 20. (Mon.) improving, in spite of a load which is really too heavy for them.

On trail again at 3:25 p.m. Passed Dugout Camp. 4:00 p.m. (Camp of Mar. 27-28). About 2 miles from point of bluff. Ice hummocks begin again a little above here. Stopped for a little while to chase 3 Rock Ptarmigan, killing one male. Kept on in a straight line for the coast, or river about 5 miles. Then across tundra. Crossed a bend of Okpilak, and struck coast about 2 miles east of mouth of Okpilak at 8:45 p.m. Got a little too far east, steering for big conspicuous pingok (rounded dome hill) which is 3-4 miles south east of Crawford's house. As I approached the coast saw that I was getting east of the round domes which form a Clump around the mouth of the Hula-hula River, and are scattered over the space between the mouths of the Hula-hula and the

Hula-hula River, Alaska.

April 20 (Mon.) Otpeliak, extending two or three miles from the coast, and only half a mile or so East of the mouth of the Otpeliak. On reaching coast saw rack and pole which I thought was Crawford's and headed towards it. Soon saw that it was Ciakuk's Camp which is on sandspit about a mile north of Crawford's. Saw Crawford's about 2 miles west, and headed straight across, reaching there at 9:45 p.m.

Rock Ptarmigan — Saw a few tracks on river a little above big bluff, and there Rock Ptarmigan crouched on a narrow black stony bar near Ongoud Camp, about 10 miles from coast (at 4:00 p.m.). Blue stalked them pretty close, but missed. They had evidently been sitting close all day, as they were crouched in little furrows (depressions in snow) with heaps of dung beneath them. Followed them up and killed one male. No other Ptarmigan seen today until within 3-4 miles of the coast in the evening.

Hula-hula River, Alaska.

April 20. (Mon.)

Willow Ptarmigan — Saw no more signs of Ptarmigan until within 3-4 miles of coast, crossing flat low tundra between Hula-hula and Okpilak. Found multitudes of tracks then in every direction. Snow not deep here, with little patches of bare mossy ground showing through. Ptarmigan had been scratching through the thin crust everywhere. About 8:00 p.m. saw large numbers of Ptarmigan on snow ahead. They were very wild, and as I approached, little bunches of from ten to fifty each, kept flying up from behind every little snow drift, where they had made their nests for the night. Saw several hundreds of Ptarmigan, apparently all Willow Ptarmigan, so far as I could see, scattered everywhere in little flocks, as far as I could see with the glasses.

I think that the Ptarmigan come

April 20. (Mon.)

down to the coast at this season, while there is plenty of food in the mountains and foothills, because the Ptarmigan are still in full white winter plumage, and the hills are now pretty bare and brown, both in the mountains and foothills, so that the Ptarmigan are very conspicuous. The almost total absence of Ptarmigan in the thirty miles between the foothills and coast is accountable for, on account of the deepness of the snow, which prevents them from getting food. On the coast the snow is not so deep, and the tops of little hummocks are bare, while the ground in general is white. The Ptarmigan are very late in coming down to the coast this spring, probably because the ice crust which formed on the snow Early in the fall after a thaw prevented the birds from feeding until this ice crust had melted on the little exposed hummocks.

April 20 (Mon.).

Snowy Owl— One seen flying around over the Ptarmigan flocks, a large, dark-spotted bird, which finally alighted in the midst of the scattered Ptarmigan. Several of the Ptarmigan seemed to be not more than 50 yards away, but did not seem to be alarmed. I was looking through the glasses 3/4 of a mile away and the Ptarmigan seemed to be all around the Owl, which loomed up pretty large in comparison, as well as being darker in color.

This is the third Snowy Owl seen on the trip. One flew over Crawford's house on the coast March 27 (about 4 miles from here), and we saw one in the foothills March 30th.

Found notes in Crawford's house as follows:

"April 3. Capt. Bernard, Parmont, Mey and Wilkins stayed here the night of 2nd April. We had nothing for dog food but tallow, so fed to them the fish that was on the rack. Capt.

April 20 (Mon.).

Bernard fell on his sledge the second day out on the ice cutting his head on the handle bars. He had to be brought back. He is progressing favourably. Harmon and Wilkins came ashore on the 27th from the 3rd Camp where we were held up by open water. They brought in a load of supplies which the party did not need. The westerly wind broke off the ice some 4 miles inside the old camp so they were unable to return to the party. We have one home sled and seven dogs. On the ice are Stefansson, Storkerson, Johansen, Anderson, McConnell and Crawford, 3 sledges 19 dogs." [Unsigned].

"Collinson Point, Alaska April 14, 1914. --
--the cut on his forehead (Cpl. Bernard) has healed up nicely, but he has had violent headache in the mornings - and now has this stiff neck. This morning his neck is much better than it was yesterday. Cpl. Holmes and Harmon are going to Crawford today and if they see no trace of you there they will go on to Martin Point and make further enquiries both for you and the supporting party of the "ice party" who should by this time be ashore. Thinking that the dogs with this party may not be available for use at Collinson Point for some time, a trip was made to Flaxman Island to bring "Billy" here so that an opportunity might be had to make arrangements with him to take me to Point Barrow, thus leaving all the dogs now at Collinson Point for use for freighting from the Beloeden to the Mackenzie delta."

Geo. H. Wilkins

Okpilak River to Collinson Point.

April 21. (Tues).

Wind:
W 2.
W 5
SW 5.

Max.	Min.
-10.	-10
-7.	0
-5.	-12. (Collinson Pt.)

Clear. Fairly strong west wind in forenoon. Cold. Wind moderated a little in afternoon. On trail 10:00 a.m. Saw Aiktuk in morning. He had recently been to Collinson Point, and says the trail is bad from Saliochit River west. Heavy snowfall made sledding bad along coast and a new trail has been broken straight across from the "Ten-mile Point" (Cache and 2 Cross Racons) straight across the bay to Collinson Point.

Off Saliochit River sandspits met two sleds coming from west about 3:00 p.m. Mr. O. Jenness, Chas. Brooks and Armand Castel bound for the East ward, carrying out directions as arranged by Capt. Bernard, who was to be in charge of hauling gasoline for launches and provisions for Mackenzie River survey parties. Stopped for lunch together and made tea. Traded sleds with Brooks giving him heavy new Point Barrow sled and taking the light "Thompson sled",

April 21. (Tues.)

the latter being too light for heavy freighting. No news from ice party. Jennes is going down to take inventory of "North Star" property, which was to have been done by McConnell after the latter's return from the ice.

Passed "Ten-mile Point" at 5:45 p.m.

Reached Collinson Point at 8:00 p.m., just at sunset.

Tiriglok had just come in from Flaxman Island. He says that the snow is deeper the further west one goes.

George H. Wilkins started for Point Barrow yesterday with "Billy" Natkusiak whom he had hired.

Collinson Point.
April 19th, 1914.

"Dear Dr. Anderson:

It was not without consideration that I left Collinson Point before you came home. I did not care to do this, but on the other hand I do not want to miss an opportunity of getting a complete set of pictures representing

April 21. (Tues).

"Fleet Whaling by brig a few days later. It will even now be after the 1st of May I expect before I reach Point Barrow and I am given to understand that whaling commences about the 27th March. If my leaving or engaging "Billy" does not meet with your approval I ask your forgiveness, but I take it that in this Country or on an Expedition one must be capable of looking after their own work if they are to accomplish anything. I will bring back the mail and try to secure electric batteries for the North Star. I do not know of anything else that is to be brought from Point Barrow. With regard to the things left at Cape Hallett by Jeunes; it will depend on the state of the trail how much of it I will bring back, but I will bring all I can. I believe that Mr. Brower will accept my order on behalf of the Expedition for our board while we are at Point Barrow and for the few things that we may have to buy.

"The arrangements that have been made with Billy are that he is to get one hundred

Collinson Point, Alaska.

April 21. (Tues.)

"dollars, (or dollars) clear, all his expenses are to be paid. I think this is reasonable compared with what has been paid for the hire of a team that helped with Chipman's load, and the hiring of Billy's team will leave all the other dogs for use at Collinson Point. The length of our stay at Point Barrow will be decided by the state of the ice, or the opportunities that I have to secure pictures. Should I be successful in getting a picture of a whale being caught on an early date I will hurry back here at once, and in any case I will not delay long enough to endanger a stoppage on our way back by open water. Should I return to Collinson Point before the ice breaks up I should like to proceed to the rendevous of Chipman and Cox and so be enabled to go up the Mackenzie to Fort MacPherson in order to take pictures of the delta and the Fort.

"You will probably hear of the ice trip, and the incident that happened here from various other sources, but I will write you a few

April 21. (Tues.)

"brief facts in this letter.

"The "ice party" left Martin Point on the 22nd of March at 3:15 p.m, some two hours later we came to a pool of open water and passed another before we camped that night at about 6:20 p.m. These pools were not more than ten yards across but showed that the ice in this vicinity had been disturbed recently.

"The next morning while we were at breakfast McConnell arrived at the camp; it was decided that we should accompany us to help the supporting party. Olly Anderson [Ole Andreason] had been engaged for this purpose also on the day that we left. We had not proceeded more than a couple of mile after leaving our first camp when Capt. Bernard fell while crossing a pressure ridge and striking his head against the handlebars of his sledge laid open the scalp. This wound necessitated thirteen stitches being put in it. Capt. Bernard had to be taken ashore and with him went Stefansson, Anderson, McConnell and Norwood. These four came on next day bringing

Collinson Point, Alaska.

April 21. (Tues.)

"Crawford with them to take charge of Capt. Bernard's team. Next morning we could not go more than a mile or so because of an open lead about 70 to 80 yds. wide. It was not thought advisable to cross this lead with our loads, although Storkerson and McConnell constructed a raft from one sledge, two paddles and a tarpaulin and crossed over the lead, thus demonstrating that even with one sledge and the tarpaulin they would have a safe means of transport on open water and it was thought that with two sledges together that a serviceable "makeshift boat" could be constructed.

"Four seals were secured that day, although many more were shot. The next morning the lead had closed and the moving pack travelling to the East at the rate of about 1½ miles an hour was grinding against the pack upon which we were camped. The morning of the 23rd the ice was moving slowly to the west but it was still not possible to cross the lead. Mr. Stefansson asked McConnell and Lamont to go ashore with a load of seal blubber, some sleeping

April 21. (Tues.)

bag covers and my camera and exposed films. They were to bring back 6 gallons of coal oil, a box of malted milk, and 30-30 cartridges. McConnell's sickle was not feeling too well although Stefansson did not know this, but when I volunteered to go ashore instead of McConnell he Stefansson offered no objection. It was intended that we should return that night, for it was not more than 6 miles to Martin Point by the trail and I think not more than 7 in a straight line. A blizzard overtook us however while we were yet about three miles from the shore on the inward journey and the trail was soon covered. We reached Martin Point some two hours later, but it was now of no use for us to go out on the ice again that night for we never could have found the camp in the storm. The weather did not clear until late the next afternoon, and even then we could go no further out than the first pressure ridge (about two miles in a direct line from the shore) for on the other side of this was

Collinson Point, Alaska.

April 21. (Tues.)

"a lead of open water some half a mile west opposite the trail, extending to the east and widening so that we could not see both edges of the ice. To the west the lead narrowed for a short distance but widened out further along. The Morning morning pack was travelling to the east at the rate of about 1½ miles an hour and it was very improbable that we would have found the "ice party" even could we have crossed the lead. The next morning we went out to the ridge again, but there was still open water, so I made up my mind to go to the Belvedere and bring back the remainder of the Cinematograph film that was there. The next day Monday 30th I did not go out to the ridge but Storkey was out there, and the lead was still open. On Tuesday we went out again and it was still in the same condition. I thought it was no longer of any use to wait for the return of the "ice party" to Martin Point, so came along here with Captain Bernard. We read your letter & Jim Crawford and have been expecting you back for the last fortnight.

April 21 (Tues.)

"I believe the "ice party" had enough food to last them and their dogs until the middle of May or longer, even if not supplemented by seal meat, but they may be short of coal oil for every one of the tanks were leaking badly. Whether the Point Barrow sledges will last very long on the rough ice, or whether they will be able to carry all of the things on the three sledges, but I trust that they are all safe and will have a safe return. My impression is that no attempt would be made to send a party ashore, but that all of them would go as far north as possible in a short time and try and reach land again altogether.

"Concerning the other incident at Collinson Point. About a week after my return I found Andre [Noranu, the cook of C.G.S. Mary Sachs] one night in the passage with a gun in his hand; he said he didn't know whether he would go out and shoot himself or not but thought it was too cowardly to do this. I talked to him awhile and he came inside and put the gun away. Later on he took it out to Captain

Collinson Point, Alaska.

April 21 (Tues.).

"Bernard who was working in the snow shed, he came in with Capt. Bernard and put the gun away and they had a game. Since that time he did not show any unusual signs of melancholy and on the 14th and 15th seemed particularly cheerful. On the morning of the 16th I was taking the meteorological observations at 8 a.m. and Andre passed me on his way inside, he remarked "She's a pretty bad one this morning" referring to the weather I understood for it was blowing half a blizzard. A minute or so after that Capt. Bernard came out of the house and said "Andre's blown his brains out." I hurried into the passage with the Captain and saw the body lying near the wood pile, the brains and one eye was on the ground beside it, a .30-30 rifle was near by and had the cover still on it, [Capt. Nahnens' carbine]; this had been pulled up for George to allow the free use of the trigger. We laid the body out in the end of the passage. The left side of the head was completely

April 21. (Tues.). "shattered and the brain and the left eye missing. Thompson and I dressed the body in clean clothes and laid it in a coffin that Capt. Bernard had made. It was then put on the rack to await your arrival, but on the return of Capt. Bernard Mahuken from Martin Point with no news of either you or the ice party I decided to leave for Point Barrow on the 20th. It was thought advisable for the teams to commence carting the supplies to the Mackenzie Delta and I understand that if you do not return before the 1st they will leave Collinson Point for this purpose. Capt. Bernard has asked me to say that he is sending some cases of gasolene from here because most of that which is further along the coast is in large drums. He is also sending an assortment of groceries to the delta which he thinks will meet with the Survey Party's requirements. Because all of the dogs will most likely be away from here by Tuesday we erected Arctic Hotel today.

Geo. H. Wilkins"

Collinson Point, Alaska.

Note from D. Jennes.

April 21 (Tues).

"Collinson Point, April 19th, 1914 - - - - -

You will hear all the details of the tragedy of April 16th, when André Noram shot himself. He had been very depressed ever since you left and, I gather, before that. We had been keeping a strict surveillance over him all along, but had not a moments' warning. It seems very doubtful whether it was premeditated that morning or whether it was suddenly suggested by the sight of a gun. In any case it was unavoidable as far as we were concerned, occurred in fact in spite of all the precautions we took.

D. Jennes."

Capt. Bernard stated that Noram had recently had more illusions than formerly. One day he told Bernard that last summer while at Flaxman Island he fired a gun to call the crew to dinner and killed a native boy and a dog; that if he was actually certain that the boy was killed he would shoot himself. Bernard assured him that if the boy had been shot Noram would have

April 21. (Tues).

"been arrested for it long ago, and got his mind off the subject by engaging him in a game of cards. On two or three other occasions when Noram was despondent, Bernard said that he had got him to play poker and purposely let Andre win, just to cheer him up. Andre had lost no money, in fact there had been no other gambling here this winter. Andre had ten dollars in his possession all winter which he didn't know what to do with, and shortly before his death gave it to Mrs Thompson's baby girl Annie. His only other property was a sled(?) which worth perhaps $10 to $20 dollars, which Capt. Nehmens took charge of. He had nothing else except a few old clothes.

The only relative known is a sister named _____ living in California.

He was born in Norway [1862], [52] and was about 50 yrs. of age when he died. Burial place on bluff, east bank of Manie Creek, about 2 miles east of house, near Mr Chipmans Seaway beacon. The grave

Collinson Point, Alaska.

April 21. (Tues.) was dug through 3 or 4 feet of earth and then down into solid white ice (ground ice) about six feet in depth. Mound rounded up with earth humps, marked by headboard painted, inscribed * Andre Norem

C.A.E.
ANDRE NOREM
AGED
52 YEARS
16-4-1914

Coffin made of pine boards and lined with cloth. Body dressed in Norem's best suit of clothes, brought from Nome.

The first time that I noticed anything wrong about his mentality was last fall (about October) when he asked me if I thought he was going crazy. He said that people here were continually talking about him. I assured him that such was not the case, so far as I knew, and several instances which he mentioned I knew were entirely imaginary. Several times after that he was heard to say that he was going "bugs", and seemed to worry over that more than anything else. He was a very gentle-mannered and kind-hearted man, always looking around

April 21. (Tues)

for something to do, and wanting to help somebody. He was unable to get along at all with Chas Brooks, the "Alaska" cook, who didn't want to have him puttering around the kitchen, and preferred to do the cooking alone. This was the only man who ever had any disagreements with Norain. I finally took Norain out of the kitchen, and besides a few incidental chores, his principal work was a little wood-chopping for the house. This was hardly enough to keep him occupied when the weather was good, but as his mind was not very bright, and partly on account of his freezing, which he volunteered at Christmas time, I tried to make things easy for him, but he persisted in tinkering around at something outdoors most of the time. I think that on the whole the light work kept his mind busy and he was in better physical state than if we had kept a more rigid surveillance over him.

Collinson Point, Alaska.

April 21 (Tues.)

I let him go out to the west of Flaxman Island with Capt. Bernard in January for dog food, because he wanted to go, and Bernard looked after him like a child, as he thought the trip would do him good. Latterly, before my departure for the mountains he had seemed more contented, and arrangements had been made to have him take up the cooking job for a month or so so that Brooks could help with the freighting. Brook's job has been pretty confining and the change to outdoor work would be beneficial to his health.

Andre Norem was not well fitted for Arctic work. Although he had lived many years in Alaska, he had been mostly engaged in longshoring around Nome, and had been on the trail very little. Last year he had been caught by a falling dredge machine, pinned down, and badly crushed around the lower part of the back, abdomen and hips,

April 21. (Tues.)

so that he was in a hospital at home for four or five months, and left in a weakened state for some time after that. Bernard and others of course knew him, and when Bernard was sent out to rustle up a cook for the "Mary Sachs" he followed the usual custom of Bering Sea skippers and grabbed Noran as the most suitable man who happened to be hanging around the Gibbey saloon. Noran did not particularly care where he was to go, or whether he should go at all or not, and drew lots (shook dice or cut cards) with his partner or chum there to see which one should go with the Expedition. Crawford tells me that Noran had suffered from syphilis some years back, as well as been a pretty heavy and continuous drinker, so that in all likelihood his mental trouble was due to paresis or softening of the brain due to disease.

Collinson Point, Alaska.

April 21. (Tues.) Noran had one of his bad spells while I was down to the Belvedere with mail last December, at the time Mr. Stefansson arrived. I discussed with Mr. Stefansson the question of how he could be sent home next summer considering the possibilities of taking him to Herschel Island, and ask the R.N.W.M.P. to send him out on "Belvedere" or "Polar Bear" or some other vessel. Inspector Phillips, however, told Mr. Stefansson not to bring him there. Other alternatives were to make direct arrangements with the "Belvedere", or take him to Barrow by sled where he could be taken home on U.S. Revenue Cutter next summer as a disabled seaman.

The last arrangement which with Mr. E. de K. Leffingwell who volunteered to take him along to Barrow next summer without charge, thinking that he would be of some assistance and companionship on his boat. This arrangement was I believe satisfactory to Noran.

Collinson Point, Alaska.

April 22. (Wed.)

Clear, warmer. Light westerly wind. Did not do much today. Feeling rather stiff after long trip, and have a rather bad cold in head which developed after I reached the coast.

Wind

0. Calm.
0.
0.

Max.	Min.
-8	-12
+9	-2
+10	-20.

Collinson Point, Alaska.

April 23 (Thurs.). Hazy bright morning. Clear afternoon light westerly wind in evening. Started writing up some reports and checking of inventories.

Two dog teams of the "Ice Party Support" arrived here about 3:00 p.m. Two men James R. Crawford and Fritz Johansen had come back from the ice, Dan. Sweeney had come along from the "Ice Camp" at Martin Point, and Jenness had returned from the freighting party which had been used near Barter Island. They report that Aarnout and Brooks were travelling rather slow.

B. M. McConnell had returned with Crawford and Johansen from the ice, but had remained at Martin Point to look after the ice camp until some sled should take him to Demarcation Point to look after the "North Star" inventorying.

Wind	Max.	Min.
SW Lt. airs	-3	-8
0	+7	+3
0.	+15	-15

Collinson Point, Alaska.

April 22. (THURS.) J.R. Crawford's account of ice trip:

Crawford left Martin Point on 24th. Went out with ice party until April 5th, when last camp laid over on the sixth of April. Position L. 70° 20' N. 140° 30' West Soundings three 180 fathoms

Started back 4:00 p.m. on 7th, with 2 sleds and 13 dogs No ferrying was done either going out or coming back. Stefansson, Storkerson, and Ole Andreason started ahead at same time with 6 good big dogs. Ice broken ahead, with numerous small leads. Shore party took 30 days man rations and 18 days dog food. Reached shore April 16th about 3:30 p.m. at Kamarkat, about 30 miles West of Herschel Island.

Estimated weight of Stefansson's sled and outfit at time Crawford left - 1100 lbs. Capt. Bernard's home sled.

Support party passed through some very rough, mountainous ice on way back.

Collinson Point, Alaska.

April 23 (Thurs.)

Notes from Fritz Johansen's account of his trip.
Estimated weight Stefansson's sled at time of leaving, about 1000 lbs. Sounding at last camp 175 fathoms; day before (at same camp) 150 fathoms. Apr. 5th, traveled very little, but went from 30 fathoms to 150 fathoms. April 4th. 70° 30' 11" N. & 140° 50' 22" Started March 22nd. On 24th, six mile N. of Martin Point, 15 fathoms. No trouble with open water until March 25th, about a mile further out 16 fathoms. V.S. Shot several (five) Seals. Camped all day on account of open water. Next day land filled with drifting ice (east and north). 27th. Wilkins and Arnoult went ashore, and big gale came up lasted until next morning; found they had drifted east opposite Boundary (148 W). Sounding 19 fathoms (28th). On 28th, belt of drift ice frozen over, but not strong enough to bear up. On 29th made Cache old clothes, etc, with flag; also repaired sleds. 30th. Blowing morning. Started 1 p.m. Crossed some young ice. In evening stopped by slush ice and open water 18 fathoms.

T. pg. 27th

April 23. Receive several short notes and memoranda from V. Stefansson, dated Apr. 6, 1914. The only note in nature of orders is as follows:

"At Sea, about 40 miles off shore, Ca. Long 140° west. April 6, 1914.

"Dear Dr. Anderson:

"The unexpected easterly drift, of which the support party will tell you, makes it increasingly possible that we may have to land in Banks or Prince Patrick Islands — we are travelling north and the drift has thus far carried us east. It will therefor if we fail to return before open water fall on you to make in my absence a division of the total resources of the Expedition between the three ships of the Expedition. My instructions written at Collinson Point last month cover this situation in general. To recapitulate: It is understood that of all articles to be classed possibly as luxuries the Alaska is to take all there is, unless there seems to be more than she needs

Collinson Point, Alaska.

April 23 (Thurs.)

(in your opinion and that of her scientific staff). All luxuries are to be classed such things as milk, canned fruits, dried vegetables, flavoring extracts, dried fruits, &c.

Before we parted the other day Mr. Cox and I figured that at 500 lbs. per month we have on hand now at Collinson Point, Belvedere, and Demarcation, flour to last the whole party (three ships) over seven years, and at 300 lbs. per month sugar for five years. It shall therefor be possible to fit the Sachs and North Star so each can winter comfortably for two years without stinting the Alaska on staples. Hardbread and tea are also abundant and there is a considerable quantity of coffee. You might take most of the coffee, but leave a little for Capt. Bernard who is very fond of it. Give the Sachs and Star plenty flour and sugar and what hardbread, rice, beans, &c, you can spare and plenty coal oil (out of the Harlak's supplies)

April 23 (Thurs.)

[Mr. Stefánsson evidently forgets that the goods shipped on Belvedere, except 70 tons of coal for the return trip of "Karluk," and distillate for the "Mary Sachs" were purchased at Nome, except gas machine and some left-over equipment on my special requisition to make up deficiencies in the stores of the southern party for the next two years. All this was done after the Karluk had sailed with full and plenty for herself, as well as to outfit the "Mary Sachs"]. — they should also have primus stoves in some number — if the ones in Duffy's and the Star's outfit are not enough some might be purchased from the Belvedere or elsewhere if possible. I especially want the Pt. Barrow "Svea" stove to be on the Sachs. The Khotal stoves would be suitable for us to use as heaters, tho we have not found them suitable for cooking in Camp.

"I have arranged with Capt. Cottle to take the launch for Mr. Cox to a point where the white fish Castle is, some 8 or 12 miles East of

Collinson Point, Alaska.

April 23 (Thurs.). "Akpatriatsiak (Escape reef) for a Contract price. I am writing Mr. Allen who wants to go with us to Macpherson that is he will "sign on" as Engineer for Mr. Cox's launch to give his expert advice when needed we will furnish him with food and transportation from the Belvedere to Macpherson in exchange. As he is said to be a fine Engineer this will be a good arrangement for us in case something goes wrong with the Engine.

" It will also be necessary to haul 300 gallons distillate, some other oils and sundries, and about 1200 lb. food to the Mackenzie and I am asking Capt. Bernard to take charge of this work; in case he is incapacitated I am asking Mr. Crawford to do the work with the assistance of Mr. Sweeney and Mr. Castel. They should have at least two teams, if not three, with three teams the work is soon finished as it is not far from the North Star to the Mackenzie.

"In case we should not come back

April 23 (Thurs.). "from the ice before the "Jacks" is abl[e] to sail. I am giving Capt. Bernard instructions as to what he is to do. These are substantially a duplicate of those I included in my last instructions to you — that he is to outfit with staples for a two years stay in Banks Island with view to our work up there and the possibility, which our present steady eastward drift makes increasingly probable, of shipwrecked men from the Karluk landing there. He is, before going to Banks Island, to cache for you or land where you direct, but west of Cape Kruzenstern, 15 tons of freight for the Alaska. The only condition upon which he is to refrain from doing this is in case the North Star is by shipwreck or other unpreventable accident prevented from going to Banks Island. In that case it seems to me that due regard to the safety of the three men of our ice party and the men of the Karluk demands that the Jacks shall expose herself to no avoidable

Collinson Point, Alaska.

April 23 (Thurs.)

dangers or delays before establishing a base on Banks Island for us or the men of the Karluk to fall back upon.

"Besides seeing that the Sachs and Star are as well provided with staples as our resources permit, after all the demands of the southern party have been satisfied please see to it, and ask the scientific staff to see to it, that we get stationery, one Bijou typewriter, and such scientific instruments as each man can spare without hampering his own work - instruments which we can use in getting information on land or sea. I should also like some scientific books, especially non-Eskimo anthropological works and Chamberlain's Zology. Jennes is so fresh from Oxford and has had books so much and will be so busy with Eskimos, that he needs books less than I do - except Eskimo books, for which I do not care unless there are duplicates.

"I have ordered 4 new Mann. Sch. rifles and ten or twelve thousand rounds (or so).

April 23 (Thurs.) "I don't expect the Star or the Sachs will ever need anything of what the Navy will probably send us, but the Alaska could get it in the fall of '14 or spring of '15. For that reason I would like very much to get one more of the Mann-Sch. rifles you now have and all but 1000 of the ammunition so you can get what is coming us. And please assign Mr. Wilkins the Lee-Enfield rifle and try to get extra ammunition for it from the Police.

"I have engaged Mr. Ole Andreason as engineer of the Star, but in case we do not return ashore his services will not be available. Mr. Wilkins is probably the best available gasoline engineer in the country (apart from those that have jobs) and he is the only member of our scientific staff who could go to Banks Island without the impairment of his prospects for work. I have therefor asked him to take

Collinson Point, Alaska.

April 23 (Thurs).

"charge of the Star. He should have two Competent assistants, one of whom might be Pedersen and the other Castel, unless it might seem advisable to transfer Nahmens to the Star and take Pedersen for the Alaska. Seymour is another man who might take either job. In any case it must be understood that Wilkins is in Command and you must be sure the men willing acknowledge this before sailing. While we want Wilkins' engineering skill on the Star he should be known as Commander and not engineer and one of the men engaged should if possible be an Engineer — both Pedersen and Nahmens are.

"While the Sachs is going to Dolphin and Union Straits the Star should be working up along Banks Island she should sail for there as soon as ice conditions allow. She should aim to winter at Norway Island unless she can get across to Prince Patrick Island.

April 23 (Thurs).

"The Jacks might winter there or farther south, so as to form a more southern base. If I myself can connect with the Star in Banks Island I would try to get farther north with her, leaving the Jacks to fall back upon in case of shipwreck. In that case Williams can, if he desires, transfer to the Jacks, so as to be near the Eskimos whom he wants to photograph.

"While I have not the time or facilities here on the ice to make these instructions more full, I trust you understand their spirit and trust you will make every effort to carry them out with forethought.

"I hope you have a successful spring in your scientific work and a safe and pleasant voyage to Dolphin and Union Straits. V. Stefansson

Commander
Canadian Arctic Expedition

P.S. Mr. Allen of the Alaska wants to go with

Collinson Point, Alaska.

April 23 (Thurs.).

"Mr. Cox's launch to Macpherson. I have written him that if he will sign on as engineer of that launch for the trip and look after the launch on the way down we will furnish him food and transportation for himself and 200 lbs. luggage, or less if he can get on with less.

"I have given Capt. Cottle a memo of agreement trading 2 barrels of salt meat for 4 cases milk and the rest of the meat at the rate of 2 bbls. flour for 1 bbl. meat, except what meat we use. I think this is better than trading for bacon we may never get.

"I think Capt. Beuard should have a voice in choosing a Cook for the Sachs rather than from getting Levy but the Norwegian Cook of the Polar Bear is also an applicant. I have asked Capt. Beuard to choose one of those two men."

[V. Stefansson]

Collinson Point, Alaska.

April 24. (Fri.)

Wind. 2 Southerly air. " Easterly. do.

Max.	Min.
+4	0
+23	+8.
+15	−10.

Warmer. Hazy bright sunshine. Very trying light for the eyes. Writing and letters and preparing to send Sweeney, Jenness and Johansen out.

Mr. Sweeney is to take charge of the freighting from S.S. "Belvedere" and "North Star" to Mackenzie River, taking one sled and seven dogs from here, besides the two sleds now at work with Harmond Castel and Chas Brooks. Capt. Bernard recommends the advisability of putting Sweeney in charge rather than Harmond Castel because Sweeney knows the country better, and has had more trail experience, while Castel, by his own to be cruel to dogs and does not understand so well how to keep them in shape.

Gave him a copy of list of stores which Harmond Castel had orders from Bernard to freight, modifying same by adding five cases gasoline for Mr. Cox's launch, it being the opinion of Capt Bernard and the engineers here that gasoline is much

Collinson Point, Alaska.

Apr. 24 (Fri.).

more reliable than distillate for the small launch. Revised list as follows:

15 cases distillate, taken from Collinson Point by Raymond & Castel (taken from here because distillate at Belvedere is in large drums unsuitable for sled transport.

To be taken from "North Star".

3 gunnies flour, 300 lbs.
1 sack sugar, 100 lbs.
Beans 100 "
Rice 100 "
Cornmeal 50 "
Rolled Oats 50 "
1 case dried pears
1 " prunes
1 " peaches
25 fathoms rope
20 lbs. salt.
Mixed Spices 10 lbs.
Matches
Coffee 20 lbs.
Tea 10 lbs.
Baking Powder 6 cans
15 Cases Distillate

April 24 (Fri.)

To be taken from S.S Bolovdeu:

Sufficient gasoline so that with the gasoline which may have been taken by Harmon Center from the Bolovdeu there shall be six cases of gasoline delivered at the Mackenzie River cache four cases for the small launch and one case for priming for the big launch.

The total amount of gasoline and distillate to be delivered at the Mackenzie River cache is Thirty-six cases, viz; Thirty cases Distillate and one case of Gasoline for the big launch, and one case of Gasoline for the big launch, and four cases of gasoline for the small launch.

From Collinson Point (requested by J.R. Cox)

1 case Dehydro Onions
1 small tin Dehydro Soup Vegetables
1 dz. 100-tablet boxes of Pabloid Tea
2 tins Borden's Malted Milk (from Martin)
10 lbs. (20 cans) Cocoa " " "

Collinson Point, Alaska.

April 24 (Fri.)

Wrote letter to W. Sprague Brooks, who is in charge of Duffy O'Connor store at Demarcation Point. Asked him if he could spare the time to help Mr. Johansen take some tidal observations there, simultaneous with observations continued at Collinson Point.

Wrote letters to K. J. Chipman giving latest news, and asking them to send C. Olsen back to assist in spring's work if he is not needed at Mackenzie River.

Wrote E. M. McConnell instructing him to proceed with detailed inventory of the "North Star" outfit, as previously planned.

Mr. Jenness is to go east with Mr. Sweeney's sled to look over the field for a suitable place for ethnological and archaeological work. From present information it is probable that the most favorable place to study Eskimos is at the sealing camp at Icy Reef, a few miles east of the Belvedere, and he may stop off there for a time.

April 24. (Fri.) Mr. F. Johanssen is to go with the Survey as far east as Duffy O'Connor's place near Demarcation Point, where he will stay for a time with Mr. Brooks. He thinks that there is a better opportunity to do field work there than at Collinson Point at this season. He is also to take up the tide staff which was used to take tidal observations at Martin Point and which is now at the Polar Bear at Humphrey Point. He is to endeavor to secure tidal observations which will be simultaneous with the automatic tide gauge installed at Collinson Point. This is considered important as throwing light on the direction of the tides which is an important point to be determined, as the direction of the tides as well as the volume may be an indication of the character of the unexplored polar sea.

Collinson Point, Alaska.

April 25 (Sat.)

Wind.
E 20 sty
E 14 "
E 8 "

Max. Min.
+8 +4.
+10. +5.
+12. 0.

Cloudy a. m. Strong east wind and snow drifting thickly. Clear overhead in afternoon and Mountains visible. The day was not cold, and the wind and snow could have been faced, but as soft snow and strong head wind make progress slow with sled, the Mackenzie sled did not start today, although everything was in readiness to start either in the morning or evening, whenever the weather should turn favorable.

Have had Tiriglok's wife do a little work in return for some supplies they want. She repaired one pair of Caribou skin pants, and scraped some deer and sheep legs, making two pairs of leg skin mittens.

26th. Pd. Tiriglok 2 large cups black tea, ca. 10 lbs. hard bread. Some more hard bread is still due, but he did not care to take more at present as he has grub at Official house.

April 26 (Sun.). Hazy bright. Calm in early morning. Wind started up from west about 9.00 a.m. Wind blowing pretty strong all day and snow drifting. Wind slacked a little in afternoon, but stronger again at 10:00 p.m. Cloudy in evening

Wind.
W E sty
W 35 "
W 14 "

Max. Min.
+10. 0
+18. +10
+18. +8.

Sverney Johansen and Jensen started East about 9.00 a.m. with dogs. Fair wind. Tiriglot and family started a little later, dragging a small handsled behind his larger sled. He has a rather large family, one boy 8-9 yrs., one girl 5-6 yrs., one girl 2-3, one infant. Another boy 4-5 yrs old is up the Hula-hula with Pikalo. One small girl, Ikiakpuk, 5-6 yrs old was left here two or three months ago while Tiriglot was at Flaxman Island and stayed with Mr. Thompson.

They started East with mast and sail rigged on sled.

Phot. 31. #9. Tiriglot sled starting out under sail. 11-1/50-D. Haze. 9:00 a.m. (Frederick Jensen at bow)

(60)

(61) #10. do. (from astern)

Collinson Point, Alaska.

April 27. (Mon.)

Hazy sun. Strong west wind all day. Snow drifting. Cloudy in evening. Did some writing.

Capt. Bernard is building a small wooden skiff, as his dory is too heavy for convenient launching from the "Mary Sachs." He has built a large work shop with walls of snow-blocks and canvas roofing.

The two Eskimo boys, Fred and Stey, and Chas. Thompson are working at shoveling snow and digging out ice around the "Mary Sachs." The ice is frozen to bottom around her, but when they get it into the gravel, water seeps through.

Wind.	Max.	Min.
W. 25 Hy.	+12.	+3
W. 21.2 "	+8.	+4.
W. 10.3.	+13.	+3.

April 28. (Tues.) Clear a.m. Colder. -1° at 8:00 a.m. Light westerly wind. Warmer in afternoon. Boys overhauled the large rack outdoors, removing snow which had drifted underneath the cover between the racks, and had started to melt and freeze again.

On rack - 20 gunnies (40 sacks) flour
sacks Scotch (white) Rice
" Jap Brown Rice
1 case Bacon (100 lbs.)
1 roll blankets (gray Jaeger)
2 rolls Jaeger fleece.

Light south wind at midnight.

Wind.
W. 4.
W 5
Calm

Max. Min.
+5. +3
-25. +12.
-20 +3.

April 29. Collinson Point, Alaska.

April 29. (Wed).

Wind:
S. Lt. airs.
S do.
S. do

Max. Min.
+6 +4
+15 +8.
+10 +2.

Clear. Warmer. Bright sunshine in morning. Bright hazy in afternoon. My eyes are troubling me considerably - whether due to eyestrain or effects of snowglare, I am not certain. My eyes ache after an hour or two writing, and on going out of the rather dark house find that my eyes do not accommodate themselves to the bright light as readily as they ought to, and on going indoors soon after being out only two or three minutes, am almost totally blind for several minutes (which is not unusual) but what worries me is my eyes pain me at the same time. I have not been snowblind this spring, having worn goggles most of the time on the last trip, and in fact never had the experience of being really snowblind.

April 30. (Thurs.) Clear. Fairly strong West wind.

Wind.
W 7
W 14 Sty.
W. 10 "

Kopak, his wife Ommja and two small boys, arrived in afternoon, having made trip from Flaxman Island in 2½ days. They lost a child during the winter, six days after its birth. Ommja has lost eight Children in all.

Max. Min.
+9. +7
+10. +6
+9 +3.

Kopak has killed no Caribou since last fall. He saw about five early in the winter near Kadlawsilik but did not kill any. He brought a letter from Mr Leffingwell who is now at Flaxman Island. He has been surveying out to the Kupaurak, but has been delayed by bad weather.

Collinson Point, Alaska.

May 1. (Fri.)

Wind.

8 a.m. W. 8. Sty.

Clear. Light west wind in forenoon. Hauled to west in afternoon and then to south. Calm at 11:00 p.m.

Clear. −14° at 11:00 p.m.

Spent most of day typewriting some papers and orders.

Engaged the use of Kopatk's three dogs for trip to Belvedere and back six days. Augatitiak with two other dogs (Blue's) will go as far as Belvedere and bring back some sugar as well as Levy for coal, and perhaps one or two other men. I shall go on as far as the North Star

Max. Min.
8 a.m. +15 +12
8 p.m. +18 +2

Alfred (Eskimo) came in about 11:00 p.m. from Saliwichit River. Said he had started at 9:30 a.m. but trail was heavy. He had Pikalo with one of tobaccos and other things.

Willow Ptarmigan — Alfred says they are abundant now on the Saliwichit River. He brought down 135, nearly all caught with snares as they are

Collinson Point, Alaska.

May 1. (Fri.) out of .22 rifle ammunition.

He brought a good many clean specimens, out of which I picked as many as there is any possibility of my skinning. The "house" needs a good many Ptarmigan for the pot now. Nearly all these Ptarmigan are pretty well streaked with reddish brown around the head and neck, but I saw no males with heads entirely dark as yet.

Tundra Weasel (Putorius)

Alfred brought in a Weasel caught on Tuliruchut River Thursday Apr. 30.

*167. ♂ 350-92-51.

Color intermediate between winter and summer: back greyish brown, sides white.

168. ♂ Lagopus l. lagopus. ♀169. do.

170. ♂ do. " " " 171. ♂ do.

172. ♂ do.

Collinson Point, Alaska. to Okpiak R.

May 2. (Sat.)

Hound.

8 p.m. E 14.

Max. Min.
8:00 a.m.
+18 -15

8:00 p.m.
+35. +8

Clear day. Calm morning. Light East wind towards noon. Somewhat cloudy late in afternoon and wind stronger. Cloudy evening.

Started for "Belvedere" with 8 dogs. Left Collinson Point 10:50 a.m. Reached 10-mile Point 1:00 p.m. Heavy sledding on soft snow up to this point, but not so bad as on 3/31 as trail is broken. Reached "Old Sylvia Beacon" at 2:50 p.m. and Crawford's house about 4:00 p.m. Snow hard east of 10-mile Point. Dogs pretty wild when near Crawford's and ran away after Ptarmigan. Billy, Bernard's leader, obeys "gee" and "haw" momentarily, as usual, but immediately swerves back on to his own old course which he will keep persistently.

Ptarmigan. Dogs nearly ran one down at mouth of Kuka-kuka River. Contract has a hundred or more on his rack.

Snowy owl. Two killed, one very close

May 2 (Sat.)

specimen by Keatuk

Spermophiles - a good many out on warm days here now, Keatuk says.

Snow Bunting - Keatuk saw one the other day.

Duck Hawk - Saw one while crossing the Hula-hula delta among the little dunes.

Piriglok and family are camped here now near Keatuk. Keatuk is living in Crawford's house, and we stayed over night with them. Keatuk gave our dogs a Ptarmigan feed.

Okpilak River to Humphrey Point, Alaska.

May 3. (Sun.) Wind. Calm. S. 12.

Max. Min.
+20 +16.
+30. +20.

Snow melting, very warm, at Collinson Pt.

Clear all day. Rather warm. Left Crawford's house 9:30 a.m. Crossed East end of Okpilak sandspit 10:35 a.m. Passed "Billy's Cache" (west end of Barter Island 10:50 a.m. Reached Joe Bernard's old house ("Teddy Bear" winter quarters 1909-1910) at 11:45 a.m. Dogs broke too line, ran away and caused some delay. Passed black dunes at mouth of Jago River 1:20 p.m. Reached Ole Anderson's old camp 1:40 p.m. Stopped for lunch 1:45 p.m. to 2:40 p.m. Sweeney had taken all my tent and stove. Could not take down tent as it was frozen into walls of outer house, but took stove and two joints of pipe along. Reached "Joe Camp" at Martin Point at 4:05 p.m. Found only Ingituk and his old mother A-kluk there. Sweeney had left him in charge of stuff there. Stayed two hours to rest dogs and made a rough inventory of stuff on cache.

May 3. (Sun.) Left Martin Point 6:05 p.m. Passed Ivan Klibnikoff's old camp 6:50 p.m. Abreast bluff (grave) 7:05 p.m. Abreast point of bluff. 7:15 p.m. and Sighted Schr. "Polar Bear" Reached "Polar Bear" 8:15 p.m.

Willow Ptarmigan - Inyuktuk says that there a few on mainland behind Martin Point now; but not many. Mr. Fiedler recently returned from hunting trip in mountains up Aichilik River and killed a good many; few Rock Ptarmigan.

Snow Bunting - Recently seen at Humphrey Point.

Mountain Sheep - Mr. Sam'l Fiedler recently returned from hunting trip up Aichilik River with Keania. Keania killed twelve Sheep on the trip, but as none had large horns, they did not preserve any.

Notes from Inyuktuk.

Creek just east of Collinson Point is Katak tu rok and next Creek east is Kuk bra lik rok.

Warm creek flowing into west end of Selawik is named Shu pa lik.

Okpilak River to Humphrey Point

May 3 (Sun.)

Goods left by Stefansson's "Ice Party" at Martin Point on cache

2 cases Yellow Corn Meal	100 lbs.
1 case Oat Meal	50 "
2 cases Hard Bread	100 "
1 case Yellow Pea Meal	50 "
2 cases Beans	400 "
51 boxes Cube Sugar	60
1 case Cocoa (broken open) ca	20 lbs.
1 " Chocolate " " ca	40 "
1 sack flour	50 lbs.
1 " " (Ole Andreason's)	50 "
1 tin Matches	
1 large Box Burberry Fleece (5 2 yds. Jaegle) ca	100 lbs.
1 large White Canvas Cover	
Clothing bags.	

In wooden boxes.

Beans ca 75 lbs.
Granulated Sugar ca. 30 lbs.
White Rice ca. 20 lbs.
Some small stores tools Lantern etc.
Also tent, Pemmican & Furs

Humphrey Point, to Icy Reef.
Schr. Polar Bear & S.S. Belvedere.

May 4 (Mon.)

Wind S 8.

Max. Min.
+38 +38
+55 +34
(Collinson Pt.)

Clear. Calm. Warm day. +32 at 9:00 a.m. +52 at 2:00 p.m. Snow soft on top and melting fast, particularly where sand, dirt or black objects are on surface. Small pool of water on ice near Belvedere.

Left "Polar Bear" 10:00 a.m. and arrived at "Belvedere" about 1:15 p.m. Pannigabluk, Aleshuk and another native went along. Snow rather soft and slap, rather heavy sledding in most places.

About half-way met Mr. Jenness, in company with Mr. Allen and Mr. Clark walking over to "Polar Bear". Mr. Jenness had been at Icy Reef and Belvedere and intends to go back to Collinson Point. Mr. Allen has decided not to go to Fort McPherson in Chipman's launch. Med. Oyarak on road, who gave me a letter from Chipman dated Ig-lu-Ki-tuk-tuk. Ig-lu-lik at Kak Mackenzie delta, April 15th. He and

Humphrey Point to Icy Reef. Alaska.

May 4. (Mon.)

O'Neill had arrived there on the 14th, leaving Herschel Island April 9th. Olsen was sent back to Herschel Island to join Mr. Cox, who is making a traverse of Herschel Island River after O'Neill's geological reconnaissance. Olsen will accompany Cox to Moose River (west side of delta) and later return to Collinson Point (probably May 20th to June 10th). Chipman will work in the east branch of the delta and Cox will survey the west branch.

Engaged W. J. Bauer ("Levy") to go to Collinson Point as cook and if he is satisfactory to Captain Bernard will sign on as cook of Schr. Mary Sachs on same terms as Andre Norman.

William Sullivan (colored), known as "Bill"; engaged for general work on Alaska until we reach Herschel Island at $2.50 per day. He wishes to join the Expedition permanently. Is said to be a good

May 4 (Mon)

seaman and handy all-round man. Says he has cooked on ships out of London, and will sign on either as seaman or cook.

Another man, Louis Pechette, who worked for a while at Martin Point, also is ready to work for the Expedition if we want him.

Glaucous Gulls – Two large Gulls (species called "Nauyavuk" by the natives) flew over the Belvedere yesterday. The first Gulls of season.

Ducks (or Murres). Capt. Cottle told me that yesterday natives saw three Ducks (species called "Puteulak" at Point Hope) Pallas' Murre: XI, were seen at edge of floe yesterday. "Pop" (Indian Point, Siberia) native) says he saw these also, but that they were the white-backed Eider (Somateria vnigra) which the Kowmolliks call Amau'lik or Amauli-i'a-luk.

Snow Buntings – several seen near ship. Very tame. Still in winter plumage.

Icy Reef to Demarcation Bay.

May 5. (Tues).

Wind. SW. Lt. air.

Max. Min. +34 +30 +58. +30.

Fine, calm weather at Collinson Point).

Calm. Bright hazy morning, very warm, and snow melting fast. Considerable water on ice inside of reef for several miles near east end of Icy Reef.

"Hey" Angatitshak started west for Collinson Point with Baur, Sullivan and Addison. Had him take one 100-lb. sack of sugar and 5 boxes (60 lb.) Cube sugar from Belvedere for Collinson Point: We had only two or three days supply of sugar at Collinson Point when I left.

Left Belvedere at 10:00 a.m. Our native sled followed (Apatak, "Sulphur-bottom", and "Pf." Reached the native sealing camp at Icy Reef at 12:30 p.m. and as day was very hot, stopped and let dogs rest until 3:00 p.m. Met Kunak and two other men (sleds) going to Herschel Island. The Mackenzie and Herschel Island natives are

May 5 (Tues.) making their last trip to the ships before the break-up now, to get the last stores which can be obtained before the ships reach Herschel Island in July.

Several tents here - Iglum, "Cockney" Sipaidaichuk and others.

Seals - not many are being killed. Iglum shot three yesterday.

Caribou - none killed near here for a long time.

Mountain Sheep - several were killed during the winter. Examined several skins on rack here particularly around rump and tail. Found a few black hairs in every tail, but not conspicuous, and have to be carefully looked for. Cf. Charles Sheldon's notes on Southern Alaska and Yukon sheep (Ovis fannini and Ovis dalli), that black hairs in dalli show connection with fannini. No other dusky ~~patches~~ hairs on any of the sheep seen today

Icy Reef to Demarcation Bay

May 5 (Tues.)

(M. Sheep continued). Some dusky patches proved to be old blood stains. A blood-stained white sheep's skin is practically impossible to clean. The tube-like hairs absorb the blood and the blood dries up inside of the hair.

Left native Camp at 3:00 p.m. and passed Iglu's house, (with high rack and "lookout tower") (on mainland side west end of Demarcation Bay) at 5:45 p.m. Stopped 15 minutes to rest dogs and went ahead at 6:00 p.m.

Passed East end of Icy Reef 7:10 p.m. West end of Demarcation Point spit 7:45 p.m. Reached Duffy O'Connor's house, at East end of Demarcation Bay spit, at beginning of higher land (marked by Chipman's beacon on top of hill).

W. Sprague Brooks in charge here. Fritz Johansen with him. Johansen has put up a tent on the ice and has a tide hole. A seal

May 5 (Tues) came up through the hole one day and interrupted his arrangements. He expects to begin his observations in a day or two. House was leaking some today and Brooks is clearing away snow from roof to prevent damage to goods from leakage. Brooks seems to be taking good care of things.

Willow Ptarmigan. Saw a small flock fly across sandspit as I drove up. Brooks says that willow Ptarmigan are very common and tame on tundra around here, beginning to pair off. A few Rock Ptarmigan are seen but they are less common than the others.

Snowy Owl — saw — single dark-colored specimen sitting on a log ~~near~~ by Rep. Fired with rifle at 150 yds. but rifle shot low.

Snow Buntings — a few seen

Demarcation Point, Alaska.

May 6. (Wed.)

Wind Lt. Easterly airs.

Max. +34 +56. (Collinson Pt.)

Min. +30 +28

Clear. Very warm. Snow melting fast. Tundra more than half bare around house and hill to East almost entirely bare. Small pools of water on land. Let dogs rest during day intending to travel tonight when air is cooler. Tested the Mannlicher rifle carefully, about 10 shots. With sights "at par" it shoots about 4 inches low and 2 inches to left. Three shots at 50 yds. covered by silver dollar. Moved rear sight a trifle to left and with peep sight at a little over 300 yds. marked elevation. It carries true at 50 and 100 yds.

Two native sleds from east, passed at 6:00 p.m. and stopped for a few minutes. No news.

Photo: 3A. #1. Duffy O'Connor's house (62) and two racks. East end of Demarcation Bay. 11-1/30-B.S. 12:00 m.

(63) #2. Duffy's House and W.S. Brooks. 11-1/30-B.S. 12:00 m.

May. 6. (Wed.) Left Duffy's House 6:25 p.m. Cooler about freezing point. Dogs travelled well. Passed Boundary and Mr. Anderson's rack cache (landed from Schr. Elvira last fall). Reached Schr. "Anna Olga" (west end, entrance to Clarence Bay at 9:00 p.m. John Sundblad and Arland in house and Capt. Chris. Stein in tent asleep. Went on to the North Star at East end of bay (about 1 mile east) Found only Mr. Anderson there. Mr. McConnell and Mr Heard had gone "packing" to the mountains yesterday, to try to get a little fresh meat. They returned about midnight with nothing, having gone about fifteen miles inland - and gone up on a small mountain. They saw no Caribou or Bear tracks, and nothing but Ptarmigan. They said that they could see much open water off shore, looking from the mountain

North Star House, Clarence Bay.

May 6 (Wed.)

Mr. McConnell has been here about two weeks now and has done practically nothing of what he was sent here to do, except inventory a few things in the hold of North Star. He gives as excuse that he could not inventory the cache until it was brought down here. The rest of the goods are on a rack covered by tarpaulins, about 5 miles west. I had especially mentioned tools, of which the bill of sale specified "one thousand dollars worth", but he has not listed these, on the statement of McAnderson that "the North Star had no tools to speak." There seems to be marked disinclination to open up either cache or tools to get at the real facts. Anderson probably is sitting tight in the interest of his brother Alf, who is now on the ice with Stefansson, and who has been engaged as engineer of the "North Star". However, I told McConnell that

May 6 (Wed.)

I wanted a detailed list, as I am supposed to co-ordinate the activities of the three schooners of the C. A. E. on this coast, and the Government will want a definite statement of what Mr. Stefánsson purchased, if he does not come back to get it himself. He wished to have McConnell do this, but McConnell is not as responsible a person as I would like to have in charge. However, there is no one else available.

Thick fog came up from the land side towards midnight.

Snowy Owl seen on little hill east of Duffy's in Evening.

Ptarmigan a few seen on tundra coast banks. Mr Anderson says they are very numerous around his house.

Clarence Bay, Yukon Terr. ("North Star")

May 7. (Thurs.)

Thick fog in morning and lasting all day, turning to snow at night. Strong east wind all day, increasing towards night. Snow drifting thickly in evening

Wind.

+30 +20

+32 +20

Dan Sweeney arrived about 6:00 a.m. with C.A.E. sled from Herschel Island (47 miles), leaving the Island last night at 8:30 p.m. He brought a letter to me from Mr. J.R. Cox who is now alone at Akpatoriak (Escape Reef), working on the launch. Capt. Cottle did not send along any of the tools with the launch, and Sweeney is going back to the "Belvedere" for wrenches, spanner, spark plugs, &c. as well as lubricating oils. He says there are now 150 gallons of distillate and 6 cases (60 gallons) of gasoline at Akpatoriak. Sweeney also brought one 45-gal. iron tank from R.N.W.M.P. (Herschel Island) and Castel and Brooks will bring another one. Castel and

Max. Min.

E 8 sty.

E 13 "

(Collinson Pt.)

May 7 (Thurs.) Brooks had reached Herschel Island yesterday with their two sleds at 1:00 p.m., and would come along after they had slept a little. Brooks was partly snowblind.

Sweeney started for S.S. Belvedere in evening, where he will get the canned tools, and on return trip get the remainder of food supplies from Duffy's place. He will thus clear up everything this trip, and leave Cantel and Brooks the distillate 90 gallons. 1 case (10 gals.) distillate weighs ca. 90 lbs. 45 gals. (4½ cases) = 405 lbs. + 85 lbs (tank) = 490 lbs per tank 2 tanks full of distillate = ca. 980 lbs.

Gulls - Sweeney saw first Sea Gulls (Glaucous?) on April 3rd at ——.

Seals - No Seals at Herschel now. "Inuks" had obtained 7 Seals and 2 Ugyuk (Bearded Seals) but the natives had used them up before Sweeney got to the Island.

Clarence Bay, Yukon Terr.

May 7 (Thurs.)

Rabbits — Sweeney said that Olsen & Castel and Brooks were out of dog food on reaching Aklavik-Victoriak and had to go one day up the river, killing about forty Rabbits and a number of Ptarmigan. Says that Rabbits are leaving the willow brush and going to higher land as the water season approaches in the delta of Mackenzie.

Clarence Bay, Yukon T.

May 8 (Fri.)

Wind.

E 10 sty

E 5 "

Max. Min.

+24. +21.

+30. +24.

(Collinson Pt.)

Gale from N.E. all night, and snow drifting thickly. Clear overhead but strong N.E wind all day, and snow drifting. Wind dropped suddenly about 7:00 p.m, then shifted to a light S.W. breeze.

Clarence Castel and Chas Brooks arrived at 6:30 a.m., having left Herschel Island at 7:30 last night. O. Olsen arrived from Herschel Island about 10:00 p.m. He brought two Seals from the Island.

Decided to have Olsen stay here, as he came in last, and have Castel and Brooks haul the distillate tanks down to Alpatinatsiak. Olsen and Mc Connell will start at once hauling logs to make a cache near Steins house, at entrance to bay (for convenience in re-loading) and then will start hauling the goods (about 17 tons) down from M. Anderson's Cache at the Boundary. The other

Clarence Bay, Yukon Terr.

May 8 (Fri.)

sleds will also help finish up the job as soon as they finish this last job of freighting for the Mackenzie River survey parties. Mr. Sweeney is to bring back another man from the Colorado to start work on the North Star, as Mr. Anderson is not here to look after her. Capt. Anderson says she should be calked some and painted so that she can be hauled out on rollers, from the land where she is now kept and dry. He says that two men can easily haul her out on the ice, and then she will gradually settle down into the water as the ice melts.

Clarence Bay to Herschel Island.

May 9. (Sat.)

Wind.
N 10.
N 5.

Max. Min.
+27. +20.
+32 +26. (Collinson Pt.)

Cloudy at 6:30 a.m. light SW wind. Slight fog, which soon cleared away. Much black "waterssky" to north and east. Mr. Heard of Polar Bear asked to go along to Herschel Island, and as I am travelling light, I took him along, with sleeping bag. He has left some of his gear at the island.

Left "North Star" 9:00 a.m. Kept trail along coast; low bluffs 10-15 ft. high. Reached Kamaktak at East Edge of bluffs at 12:30 p.m. Petersens tent is standing here, with stove and a few utensils inside. 15 miles from North Star. Stopped for a lunch and to rest dogs.

On trail again 2:10 p.m. Reached Kunwalik 5:15 p.m. (ca. 15 miles from Barracks). — a rounded hill on coast with low Cand on all sides; grave on tip. Reached R.N.W.M.P. barracks at 8:45 p.m. Considerable water was

Herschel Island, Y.T., Canada.

May 9 (Sat.)

flowing out of mouth of Herschel Island River; just reaching to Yeal East of "Southwest Sandspit," over the ice, and creeping out at the rate of about a foot a minute.
Wind stronger in afternoon and a little snow drifting along the sandspits (from W). Snow falling at midnight. Colder in afternoon than in morning. Considerable water in pools on ice between Flaunders Point (SE sandspit) and the Canada (Ship Harbor), and there were many pools covered with thin young ice just strong enough to bear up a light sled, ground a pleasant mushy bare. Dogs kept dashing madly ahead as trails got fresher around island, and as they are used to being driven on a sled with strong iron brake (which my sled is not supplied with) there is no checking them, and they take ice-ridges and tide cracks at

May 9 (Sat.)

any angle with flying leaps and cheerful abandon.

Police here: Inspector Phillips, in charge of sub-district.
Corpolal Johnson, in charge of detachment.
Constable Parsons.
Constable Lamont "Scotty."
(Chickchagalook, Eskimo interpreter (Sik-sa-gá-lok).)

Mail arrived from Fort McPherson today. Regular spring mail comes as far north as Fort Norman. The R.C. priest brought it as far as Ft. Good Hope, and it came on to Ft. McPherson. It reached Ft. McPherson just as a sled with Kiōja (Eskimo) was starting back with his "Polar Bear" who had been taken down to be operated on by the Govt. Surgeon at McPherson. The operation was successful, a large tumor or abscess being removed from side of the neck.

Herschel Island, Y.T. Canada

May 9. (Sat).

No official mail, although Mr. R.W. Brock stated in December telegram that mail was being forwarded via Circle and Herschel. A few letters came across from Circle recently with Mr. Annette, a prospector, who brought a letter for Capt. Cottle and a few for the Polar Bear people. There were some letters for Mr. Cox which I shall take East to him, also some letters for various members of the "Karluk" party, which I asked Inspector Phillips to hold.

Inspector Phillips says that there has been no difficulty about getting natives to work for the Expedition, and that almost any of them on the island would be glad of a job. He says that Ilaviuk and some others said that they were going to make an effort to put up some Whitefish (White whale) meat this summer and dried fish in the hope of selling some to the

May 9. (Sat.) Expedition. The Inspector thinks that Capt. Cottle has exceeded his authority as ship master in using Expedition and Police stores which he is carrying as freight, for his own and the ship-wrecked Elvira crew, while he has enough stores of his own to trade & the natives for skins. However, as it seems probable that Capt. Cottle can replace it next summer, he is inclined to let the matter drop.

King Eider (Somateria spectabilis) Corporal Johnson showed me the head of a ♂ King Eider (the first duck of the season), which was shot at Herschel Island May 1st.

Snow Buntings - Numerous everywhere around the village.

Spermophiles - Corp. Johnson says he does not know of squirrels being seen on the Island, although they are common on the mainland south of the island.

Herschel Island, Y.T., Canada.

May 10. (Sun.). Cloudy at 9:00 a.m. Strong west wind. Light snow fell during the night. Warm day. Clear in afternoon. Light NE wind.

Wind.
8a.m. None.
8p.m. Lt. E. air.

Max- Min.
+24. +26.
+55. +12.
(Collinson Pt.)

Decided to go east sixty miles (approximately) to Kittigazuit to see Mr. Cox who is alone working at the launch. He had expected to have the assistance of Mr. Storker T. Storkerson to help him in his Mackenzie River survey. The non-return of the ice-party of Mr. Stefansson leaves him without a man, and if he desires it, I shall engage the best Eskimo available and send him down to help Mr. Cox. Corporal Johnson is going to start west to the "Polar Bear" tonight, and the trip will take at least four days, and possibly six days. The Inspector and the others can not go east until the Corporal comes back with their dogs, and he says that they will not start back to Kittigazuit until about May 15th

May 10. (Sun). The Police will stay at Alpatraitsuk until the Police boat comes down from the River to take them to Fort McPherson to meet the steamer "Mackenzie River." If Mr. Cox wants a native I can arrange to have him go down with the Police, and thus avoid sending dogs, or send a native sled.

Caribou = "Roxy" Memorandum and "David" came in to the Island last night. They went up Herschel Island River at the same time that Mr. Cox went up, then crossed over to Canoe River (Babbage River, or Kay Point River) and had killed nine Caribou bringing back some meat. They had also killed one Sheep early in the trip.

Left Barracks at 7:15 p.m., following the trail straight across the ice to vicinity of Stokes Point 13 miles, then followed edge of rough ice around to Kay Point (miles more) where I stopped and made tea 12:55 p.m.

Sunrise 1:00 a.m. (by Police time)

Herschel Island to Kay Point.

May 10 (Sun.)

Willow Ptarmigan – saw several on the ice near Stokes Point, and several on spit east of Stokes Point, and dogs pulled madly at intervals for two or three miles

Polar Bear – Native killed a Polar Bear at the Island a few days ago.

Winter Portage – There is a R.N.W.M.P. cabin about five miles west or southwest of Kay Point in the deep bay, at entrance to portage, but I did not go in there, as the portage does not shorten the distance much, and there is not much snow on the land now. The portage comes out on the coast again somewhere between Kay Point and Kay Point.

Kay Point to Escape Reef.

May 11. (Mon.)

Wind. None

Max. Min.
+20 +15.
+52. +24.
(Collinson Pt.)

Left Kay Point 2:30 a.m. Kept pretty close to shore. Ice rather rough, although it appeared smooth outside for some distance, stretching away to King Point, the ice did not appear very strong, like young ice, and flexible in places. As it was difficult to tell what were cracks covered with thin young ice, or merely a film of ice over old flooded surface, I thought it wise to keep inshore with my wild team of dogs.

Passed within 100 yds of a snowy Owl sitting on a bluff, stopped dogs, and got rifle out of case, and was about to shoot, when dogs heard Ptarmigan ahead and made a flying start and before I could stop them the Owl was half a mile behind.

King Point is about 15 miles from Kay Point. Stopped for a few minutes about half-way, and dogs gave a sudden leap, and as sled was light,

Kay Point to Escape Reef.

May 11 (Mon.)

I failed to catch them. They kept steadily on for about three miles, pulling over one bare gravel spit, and finally tried to climb an almost perpendicular hillside, gave it up and lay down to sleep, so that I finally caught them.

Reached King Point and stopped to rest at wreck of whaler "Bonanza" from 6:30 to 8:00 a.m. 15 miles from Kay Pt.

Reached Shingle Point (houses at west end of spit) at 11:00 a.m. Considerable water on ice of Shingle Point lagoon, covered by thin ice just strong enough to hold up sled.

Reached Akpatvieksak at 12:00 M. and found Mr Cox living alone in the cabin where "Scotty" McIntyre (Leffingwell's yacht "Argo of Chicago") wintered 1913-1914.

Very warm today and snow melting fast. Ground nearly bare here, and much water in pools.

May 11. (Mon.).

Willow Ptarmigan – numbers seen along the coast, whenever I came near the land: Males with dark heads and bodies white: Mr. Cox says that they are exceedingly abundant here and very tame. They often alight on the roof of his cabin in the morning.

Rock Ptarmigan – Saw occasional males along the coast. Mr Cox says they are not so common here as the Willow Ptarmigan.

Geese – Three Geese, apparently White-fronted Geese (Anser albifrons gambeli) flew west along outside of spit about 6:00 pm. Mr. Cox saw three more later in the evening.

Snow Buntings – common everywhere among the immense rafts of drift-wood strewn all over the land here.

Moose – Ni ŋatchiak shot – Fairly large moose – a few days

Escape Reef. West edge Mackenzie Delta.

(May 11.) (Mon). ago, about May , a few miles up the creek here, the same day the Police went west. Saw the Str at Herschel Island.

Rabbits – Mr. Cox has a few Rabbits left from the bunch which the dog-drivers brought back from the delta. Very few if any Rabbits around this place.

Went to bed at 3:00 p.m., having been up thirty hours, and driven 60–65 miles from Herschel Island here. Slept four or five hours at Herschel Island, having made 47 miles just before that. Arctic "summer habits" are coming on again – staying up until sleep is forced by exhaustion.

Escape Reef.

May 12 (Tues).

Wind
S. 3
S. 3.

Max. Min.
+33 +22
+56 +30
(Collinson Pt.).

Clear, warm day. Snow melting fast. The sea ice everywhere appears dark with water.

Flies - Saw flies at door of house buzzing about, for first time this season. Mr. Cox says he has seen a few in the house before.

Geese - A flock of about twelve White-fronted (?) Geese flew past, going west, about 8:00 a.m., outside of the sandspit.

Jaegers - Saw two at a distance chasing a large white bird, probably a Gull. Later, two chasing whistling Swan.

Willow Ptarmigan - Heard 3 Calling from top of house early in the morning. I was going out to try for a photograph but he soon flew away. Saw several others during the day, not far from the house, and heard their cries very often.

Snow Buntings - Saw numbers and heard them twittering frequently

Escape Reef, west edge of Mackenzie Delta

May 12 (Tues.)

Hutchins' Goose - (Branta Canadensis hutchinsii). Two flew nearly over the house about 7:10 p.m. going west. Heard them calling, and went out; Mr. Cox fired twice at long range, but missed.

Whistling Swan - One flew past about half a mile west, hotly pursued by two jaegers (Long-tailed ?). The Swan headed east, back towards the Mackenzie River.

Mosquito - Mr Cox saw a small dark mosquito struggling in the water of a small pond, and killed it. This is very early. The first ones I saw in 1910 were about June 20th, near south end of Richard Island.

Willow Ptarmigan - Mr Cox went out for a little while in the afternoon and shot eleven (10 ♂'s and 1 ♀). The males all had full brown heads; only one had a number of brown feathers on back. The female had a few brown streaks on head and neck.

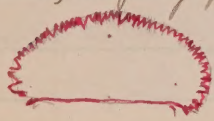
Escape Reef. W. edge Mackenzie Delta

May 12 (Tues.)

Three males had one brown feather each, among greater wing coverts

"Comb" of male, Willow Ptarmigan. Lower edge about ½ inch above line of closed eye. Greatest length 1.2 inches. Greatest breadth, at middle .6 inch. Height of tip above skull when erected .35 inch; about .15 in. above top of feathers. Pectinations fine and slender, longest ones at end, about ½ inch long. Pectinations (on right side) 74 in number, extending well down under the ends. Color bright scarlet, paler towards periphery.

"Comb" of female very much smaller, not reaching near to top of head. greatest length .7 inch; greatest width .25 inch. Color, slightly paler than male's.



Comb of ♂ Willow Ptarmigan - tracing of Comb cut off and spread on paper.

Comb of ♀ Willow Ptarmigan

Escape Reef, W. edge Mackenzie Delta

May 13 (Wed.)

Wind. None

Max. Min.
+38. +26.
+64. +38.
(Collinson Pt.)

Clear, warm day. Calm. Considerable water coming out of creek and a good deal of water on lagoon ice.

Willow Ptarmigan — Noisy all day. Cox shot two males near house.

Geese — Seven flew over today.

Little Brown Crane — One flew over house and alighted among driftwood on flat 500–600 yards away. I went after it with rifle but could not ford creek; water knee deep with slippery ice on bottom. I waded over but my boots were so slippery I had difficulty in getting ashore again.

Gulls — several seen.

Jaegers — two or three seen about station.

Snowy Owl — One flew over, low down. He passed close to a bunch of several Ptarmigan, which stood up looking at him, apparently unafraid.

Spent most of day writing reports

Escape Reef. W. edge Mackenzie Delta

May 14. (Thurs.)

Wind.
a.m. None.
p.m. W. 3.
Raining with wet snow most of night and all day (at Collinson Pt.).

Max.	Min.
+40	+28
+48	+32

Cloudy. Not quite so warm as yesterday, but snow melting fast, and creek risen about two feet since yesterday.

Hutchins Goose - Two flew over house going west about 10:00 a.m., and a flock of ten a little later.

Gulls - several seen flying over the ice.

Snow Buntings - Common: males in nearly full summer plumage.

Willow Ptarmigan - numerous and noisy. Cox shot two males.

Rough-legged Hawk - One seen.

Ravens - several seen at different times during the day.

Loon (Red-throated) seen in water at mouth of creek.

Rock Ptarmigan - Mr. Cox shot one male. Plumage still pure white. Comb much smaller than Willow Ptarmigan, scarcely projecting above top of head.

Writing most of the day.

Escape Reef, W. edge of Mackenzie Delta.

May 15. (Fri.)

Wind-
A.M. None
P.M. E 5.

Max. Min.
+40 +30
+52 +30.
(Collinson Pt.).

Cloudy in early morning. Slight misty rain from 6:00 a.m.

Dan. Sweeney and Armand Castel arrived from the west about 5:30 a.m. They had been three days enroute from Herschel Island, camping at Stokes Point, again a few miles east of King Point, and the last run to this place which took twelve hours. They report travel pretty good west of Kay Point, and very little water, but from King Point there was much water. They could not travel along rgh shore snow-banks, and the heavy sled with distillate broke down three times. They bought ~~three~~ two seals at Herschel Island. Castel had to go some distance outside of mouth of creek here to land distillate & launch. Much water on ice and flowing under ice through great holes near the creek mouth.

Escape Reef, W. edge of Mackenzie delta.

May 15 (Fri.)

Sweeney had six dogs with his Point Barrow sled (load of provisions, launch tools and supplies), and Castel had nine dogs with W. Anderson's plank boat sled.

Sweeney thinks the ice will go out unusually early this year between Herschel Island and the Mackenzie as there is so much young ice and the season is very early.

Snow Buntings - a male in full summer plumage (black and white) around door in the morning.

Red-throated loon - Saw one in creek, swimming.

Geese - a few flying at a distance.

Dusky Mr. Cox saw two bunches of Ducks, of two different species. He thought one bunch were Pintails

Escape Reef. W. edge of Mackenzie Delta

May 16. (Sat.)

Cloudy. Sleety hail falling at 6:00 a.m. changing to rain. Sky clearing by 8:00 a.m. Cooler. Creek near house has fallen 18 to 24 inches since last night.

Wind. E 6. Snow. E 8.

Hutchins Goose — a large flock, about seventeen, passed over about 6:00 a.m., going west.

Max. Min. +25 +19. +42. +26 (Collinson Pt.).

As considerable water is coming out of the creek, necessitating half a mile walk outside its mouth, and as ice is getting a few holes through, Mr. Cox decided that it would be best to move out of the McIntyre cabin and put up a tent on same side of creek as his launch. Moved his stuff around there after noon lunch.

Phots. #3. 31. Cox's launch. Akpatoriatsiak (64) 11 - 50 - Dull sun. 2:30 p.m.

(65) #4. do.

On trail 2:40 p.m., leaving Akpatoriatsiak for westward. Little water on lagoon except across mouth of creek behind

May 16 (Sat.)

Shingle Point. Met Mungalalla (Esk.) and wife at Shingle Point. They were going to Akpaliaktuk where they expected to boat from the Mackenzie to pick them up later. Reached Storkerson's cache (East of King Point) at 7:00 p.m. stopped to make coffee and started again 8:10 p.m. wooded sandspit, about 3 miles East of King Point, several old graves on hill, old short "Koyemolluk" sleds, Kayak frames, etc. bones. Cloudy in evening, Considerable water on ice, or else slush snow, nearly half knee deep a little way off shore, and inshore in pools between rough cakes of ice. Freezing after 7:00 p.m. Heavy driving snowfall from 9:00 to 12:00 p.m. Wind NW. Camped on wooded spit ca. 6 mi. E of King Pt. Camped 11:55 p.m.

Met Ptarmigan - shot a 3 which alighted in snow near camp.

Ravens - A flock of more than 30 feeding on cliffs, or making short flights near King Point.

Kay Point, Y.T., to Herschel Island.

May 17. (Sun.)

Wind.
E 6 Stg.
E 10 "

Max. Min.
+25 +14.
+25 +18.
(Collinson Pt.)

Cloudy forenoon. Snow in early morning hours, clear afternoon. Cold a. +22°F. at 9:00 p.m. Little water on ice, but ice crystals hard on dogs' feet, causing them to bleed. Our trail 12:40 p.m. Passed camp of Kretiktak and family about half a mile west of our camp. Got one of our dogs from Kretiktak, lost last month near Whitefish Station. Passed Kay Point 2:40 p.m., and headed for Stokes Point. Passed several miles outside of Stokes Point and made a straight track for Herschel Island, arriving there about 8:30 p.m.

Corporal ~~Constable~~ Johnson had returned from westward, but brought no news.

Snow Geese. A pair flew past the village (no others seen), and were killed by old "Whiskers" with one rifle shot; witnessed by Inspector Phillips, R.N.W.M.P.

May 18. (Mon.)

Cloudy. Light westerly wind. Cold and freezing all the time.

Wind.
E 12 Sty
E 8 "

Police recommended one Mungalena to help Mr. Cox in Mackenzie delta, but I knew him of old — a Baillee Island boy, who has been only one year in the Mackenzie region, and is furthermore very lazy and unenterprising. He was with us at Langton Bay at one time until Mr. Stefansson sent him away as useless.

Max. Min.
+20 +10.
+23. +15
(Collinson Pt)

The best man available seems to be "Roxy" Memorana, former Police interpreter who probably knows the Delta better than any man now living. He agreed to go down to Atpat-tiaksuk with sled and help Mr. Cox with boat, and return to Herschel Island with him before 1st of August. Consideration $100.00, and grub for himself and wife.

Herschel Island to Clarence Bay.

May 19. (Tues.)

Wind.
E 24 2dy
E 16 "

Max. Min.
+15 +10
+20 +14 (Collinson Pt.)

Cloudy a.m. Fairly strong East wind all day. Clear p.m. Cold. Layer of young ice on surface water around shores of Herschel Island strong enough to haul sled. Left Barracks 11:00 a.m. Passed Flanders Point (SE sandspit) 12:00 m. SW Sandspit 1:40 p.m. Water from the Herschel Island River on ice around end of spit. Crossed at about middle of sandspit and making a slight detour around edge of water, found no more water ahead. Snow-covered ice. Reached native camp East of Nun-a'-luk 4:20 p.m. three tents - Ningakshak, William and Navallut et al. Camp at East End of lagoon on sandspit. Left camp 5:20 p.m. and came to another native camp (Cockney and Ningakshak's brother). They had been here for a little while but killed no Seals, and intended to start for Herschel Island as soon as wind lowered. Left camp 8:40 p.m. and arrived at the "North Star" about midnight

May. 19. (Tues.) Parmout Castel, Olsen and Brooks had made a rack and hauled most of J. Anderson's stores from his cache to the entrance of Bay. McConnell had made an inventory.

Tundra Weasel. Got a fresh specimen from Ningaksiak which he had shot up the creek in willows (near Kamarkak).

*173. ♀ Putorius sp. 282-73-41.

Pelage still pure white, with only a slight tinge of rusty on head. A specimen killed on Saliochik River April 30th wt. had considerable brown fur already.

Brown Bear — Ningaksiak saw Brown Bear tracks near here April 16th

Willow Ptarmigan — a few in the willows a few miles inland. N. killed ca. 25 yesterday. Few on coast here now. One of our dogs stole two out of snares on sandspit about a mile west of camp.

Geese — Saw Eight flying west about midnight just east of Clarence Bay — the first Geese seen since leaving Mackenzie

Clarence Bay, Yukon T. Canada.

May 20. (Wed.)

Wind.
E 2 dy.
E 7 "

Max. Min.
+24. +15.
+33. +23.
(Collinson Pt.)

Clear. Warm. Light East wind. Four sleds hauled one load each from M. Gudersons cache, and two sleds hauled a second load, finishing the freighting here.

Went over to see Chris. Stien in regard to order of V. Stefansson to pay $300.00 of Storkerson Storkerson's wages to Stien, in case of Stefansson's non-return this Spring. Decided to wait a little longer to see if Mr. Stefansson would not return.

Rock Ptarmigan - Shot a female near house. Plumage mixed, about half white and half brown.

Geese - many Geese flying west in evening.

Whistling Swan - Two seen.

Lower limb of sun just touched the northern horizon last night at midnight, (May 19-20) but sun did not go below. Near East end of Clarence Bay. The midnight sun is with us again.

May 21. (Thurs.)

Wind.
E Light.
" "
" Rain.

Max. Min.
+33. +24.
+45. +34
(Collinson Pt.)

Cloudy. Light East wind. Warm. Clear p.m. Water has covered most of Clarence Bay since Yesterday morning, coming from creek in SW corner. Dick Pikok arrived from Herschel Island with Chi-chuk. (Si-tjuk)

Left North Star 12:00 M. (East end of Clarence Bay) and reached Duffy O'Connor's house (East end Demarcation Bay) 3:00 p.m. Brooks (W. Sprague) and Fritz Johansen at Duffy's. They had secured three days' continuous tidal observations. Brooks had collected a few birds and Johansen some plants and insects.

Seal. For tidal observations, Johansen cut a hole through ice about six feet thick about 300 yds from shore, hole about 4 ft. across top and ca. 18" at bottom, and put a wall tent over hole. On several occasions a Seal came up to breathe while Brooks was recording tides. He could see the Seal coming up. He would

Demarcation Point, Alaska.

May 21. (Thurs.)

thrust his head and neck straight up out of the water, and make several rapid deep inhalations and forcible exhalations. When satisfied he would flop over and sink back of head downward. After a few appearances the Seal did not pay much attention to the man in the boat unless he happened to move.

Golden Plover. Brooks shot the first Plover of the season today; a single bird seen.

Lapland Longspur. First seen here today. Brooks shot several, all males.

Gambel's Sparrow. (Zonotrichia leucophrys gambeli). Brooks shot two May 16th.

American Pipit. Brooks shot one a few days ago.

Hoyt Horned Lark. Brooks shot several specimens within the last few days.

Short-eared Owl. One shot yesterday. Had been around for some time.

Demarcation Point, Alaska.

May 21. (Thurs.)

Snow Bunting - nearly all in full summer plumage now; only a few show traces of brown.

Rock Ptarmigan - females about half-changed to summer plumage.

Snowy Owls - occasionally seen.

Snow Goose (Lesser). Saw two flying ~~said~~ with three White-fronted Geese.

Hutchins' Goose - Saw one flock of fifteen flying west.

Demarcation Point to Icy Reef, Alaska.

May 22. (Fri.)

Wind: a.m. none p.m. E 5.

Max. Min. +39. +30. +47. +34. (Collinson's)

Cloudy a.m. Light west wind. Colder. Freezing at 6:00 a.m. Warmer p.m. Thick fog. Changing to rain. Rain fairly strong from 8:00 a.m. to 3:00 p.m., thoroughly wetting us. Left Duffy's 6:00 a.m. Stopped for a few minutes at Iglu's camp near East end of Icy Reef. He killed a Seal yesterday; had no meat to spare but gave us a little blubber. Two or three days ago while Sealing at the Edge of the open water (2 or 3 miles off shore) he saw a cache of something with a pole and flag on top on ice floating outside; not very near but he could make it out plainly with glasses. He could not get out to it. [Probably Stefansson's Cache of March 29th, See p. 160]. Stefansson had made three Beacons — one about 6-7 miles N. of Martin Point, a pole; another of old clothes, with flag March 29th; and another at Separation Camp April 7th, a bare pole.

May 22. (Fri.) Water completely covers lagoon behind Icy Reef, from Sikio and Kongakut Rivers, but comparatively dry outside of reef. A tide crack across from west end of reef showed ice outside from a foot to 18 inches lower than lagoon ice. In afternoon lagoon water burst over this and we could hear rushing water falling all night on board Belvedere, two or three miles to NW. Iglue, Duck, and Sichuk arrived at ship about 8:00 p.m. and reported that there was much water on the ice, so that they had to go far outside of our morning's trail.

Geese – Saw two or three small flocks flying.

Black Brant – Brooks was out hunting most of the night and about 3:00 a.m. shot a & Black Brant from a flock of about twenty-five, the first of the season here. Iglue says few Geese or Brant rest near Collinson Pt., but many at Kongakut

Icy Reef to Martin Point. Alaska.

May 23. (Sat.)

Wind.

Cotton. foggy.

Max. Min.
+34. +26.
+40. +32.
(Collinson Pt.).

Cloudy Thick fog most of day. Left Belvedere 10:45 a.m. and reached Polar Bear at 2:00 p.m. Little water on the ice. No news at Polar Bear camp.

Ahutok Iligpak (old woman) gave me a new pair of Reindeer skin pants and some skins scraped by Stefanssons orders. Gave her an order on Capt. Cottle for $5.00.

Kéána (Eskimo) came forward with testimony that in March V. Stefansson had taken six Caribou and Mountain Sheep skins from his cache at Iglun's camp, with Iglun's permission, promising to replace same with Reindeer skins in equal number. Payment had not yet been made. Gave him order on Capt. Cottle for $24.00, the value of six Reindeer skins @ $4.00 each, the local selling price.

Snowy Owl. Saw one sitting on an ice hummock near trail about 50 yds. from shore, and slightly wounded him with Mannlicher bullet. As he was not badly hurt I

May 23. (Sat.) took him up to "Polar Bear" camp and Mr. Dixon and I made photographs:

(65) Phot. 3h. 5m. 4s. Snowy Owl. 11-1/25. Dull haze. 2 pm.

(66) 6h. 7m. 5s. " " " " " "

Dixon has obtained a fair series of Ptarmigan in changing plumage, but little else. No Ducks or Geese have been taken yet.

Pectoral Sandpipers — Sam. Nixler and Geo. Silsbee brought in three in the evening, the first seen.

Glaucous Gull — one shot today. Numbers seen.

Rock Ptarmigan — several shot today. Females mottled brown and white; males still white.

Left Polar Bear Camp. ca. 8:00 p.m. (Humphrey Point) and arrived at Martin Point ca. 12:00 midnight. Tannigoblek, Inyukuk and Ahluk there. Inyukuk has been slightly ill for some time, says he has a pain in his breast-bone, but no cough or cold.

Martin Point to Okpilak Spit, Alaska

May 24. (Sun.)

Wind. Calm.

Max. Min.
+38 +30.
+42 +34
(Collinson Pt.)

"Mild weather causing snow to melt fast. River at Collinson Pt. broke out.

Cloudy all day. Cleared a little towards midnight. Pikalo arrived at Martin Point from the west during the night. He says that many Eskimos have come to Collinson Point recently - eleven sleds at one time came from over the mountains, where they have been hunting on the Chandlar and some as far as Fort Yukon. Among them were Auktellak, Tutak (his wife) Taglukarak, Keasik, Kalloshak, Mapterut, Spanna, and others. Pikalo is taking back to Herschel Island the N.W.M.P. sled which Stefansson borrowed during the winter.

Left Martin Point at 5:00 p.m. taking as much stuff as we could distribute among our four sleds, as follows: 1 wall tent. 40 lbs. beans, hard bread, pea meal, ca. 75 lb oatmeal (sacked), ca. 30 lbs. Cornmeal,

May 24. (54th.)

Left two tents, shovels, axes, etc. as well as considerable grub which Mr. Jenness will have to look after when he comes to Barter Island.

Travelled west along outside of sandspit and had little trouble with water. Pikalo said that the Jago River was out but we were outside of it, and could not see far on account of fog.

Old-squaws (Harelda hyemalis). Saw first flock of season (5 birds) going East in the evening. Several large flocks, about 50 in each going East during the night.

Glaucous Gulls - several seen.

Snow Buntings - Numerous at Martin Point, and courting; singing a great deal.

Reached Kaktovik (Barter Island sandspit) - Bernard's house, 10:00 p.m. made tea and went on 11:00 p.m. Mr. Jenness intends to make his summer headquarters here.

Barter Island, Alaska.

May 24. (Sun.) Seal. — While passing outside of Barter Island saw a Seal on the ice about half a mile away. Ice smooth, but by crawling on my belly with partial cover from a snow drift I got within 210 yds. Estimated it about 150 yds. Shot low and Seal gave a great forward lunge, bowing the back upward, and plunged into the hole, which was about 2 ft. in diameter. Probably I hit him in the neck. Some blood on the ice and some grease drops floating in the hole.

May 25 (Mon.) Reached Okpilak sandspit at 2:00 a.m. Aiyakuk's house. Several tents here. Considerable water in lagoon, from Okpilak and Hula-hula Rivers, almost up to edge of spit, about a mile from mainland. Aiyakuk says that the water is not deep on the ice, however, in some places about up to bottom of the sled. No water on outside of sandspit. Put up tent here. Aiyakuk gave us thirty Ptarmigan from his

Wind. Calm.

Max. Min.
+35. +30.
+48. +38.
Rec'd letter from Gillinson Bros. (Collinson Pt.) broke out.

May 25 (Mon.). rack, one apiece for our thirty dogs. We fed them also a little Seal blubber.

Light snow falling in early morning. Clear (slightly hazy) afternoon. Quite warm.

Paid Aiyakuk five (5) Reindeer skins, in return for seven (7) Mountain Sheep skins taken by Stefansson. Two more Reindeer skins are due to Aiyakuk on this account. [2 more skins pd. May 26]

Left Aiyakuk's house 5:00 p.m. Water from Hula-hula River comes out about to line with end of spit. Water had covered some of the trails made yesterday. Olsen, going ahead, swung in towards land again after passing the Hula-hula water and soon got into the Saliochat water and had to swing out again. Got into deep soft snow outside with slush and water underneath

Okpilak Sandspit to Collinson Point.

May 25. (Mon.)

which made very bad travelling. Passed about 2 miles offshore at Ten-mile Point (East end of Camden Bay) about 7 p.m. and soon found much water. The creek Katakturok (about 8-9 miles East of Collinson Point, had evidently just broken out and water was flowing seaward in many streams, with a pretty strong current, but none unfordable. Few tide-cracks were open clear through and there were few places for water to go down. Saw two or three holes where water two or three feet was forming a roaring whirlpool, with floating masses of foam, plunging down under the ice. Sea ice all apparently solid although rough. Sand, dirt and gravel blown out on the ice had absorbed heat from sun and sunk themselves into little deep wells in the surface of the ice, leaving sharp, projecting spurs and pinnacles between, very hard on boots and on dogs' feet.

Collinson Point, Alaska.

May 25 (Mon). Arrived at Collinson Point 11:00 p.m. with three sleds. Johansen and Louis Pechette with the other sled arrived about three hours later, at about the same time as Aiyaktuk, who started after we did. Most of our dogs were pretty badly crippled from the sharp ice cutting the pads or soles of their feet. We kept them pretty continuously shod with cloth boots, but the cloth kept wearing out very rapidly.

No news of Stefansson's Ice Party.

Wilkins and Billy have not returned from Point Barrow.

The river whose mouth is about a mile east of here (Marsh Creek) broke out suddenly yesterday afternoon (Sunday). Mr. Blue had gone across in the morning with dog team hunting Ptarmigan and on his return in the afternoon found a roaring torrent. He managed to get sled across near mouth, the dogs swimming part of the way.

Collinson Point, Alaska.

May 25. (Mon.)

but lost his sled bag in the flood, together with about twenty Ptarmigan.

Pomarine Jaeger – First pair seen today One shot at Collinson Point yesterday.

Black Brant – several flocks seen flying today. Six flew within 30 yards of my head about half a mile outside of Collinson Point

Old-squaws – several flocks seen

Glaucous Gulls – several seen.

Pectoral Sandpipers – Mr. Blue shot three on May 24th.

Affairs at Collinson Point – Capt. Nahmens informs me that he could not put up with Capt. Bernard's interference with his management, that he, Bernard had taken possession of whatever he wanted to use for the Many Sacks without consulting him, had made wholesale trades with natives and that when Mr. Jenness arrived Nahmens had asked him to take charge of house and stores.

May 25th (Mon.)

Mr. E. de K. Leffingwell came over from Blackman Island May 19th. Capt. Bernard bought a large bill of Goods from him on credit and sent two sleds to bring the stuff back.

Consumption of stores has been excessively heavy since I left. The camp was about out of sugar when I left May 2. I send 160 lbs. back with Mey from "Belvedere", arriving May 8th. Now on 26th, eighteen days later, this has been used up, together with 25 lbs. which Bernard got from Leffingwell. The average consumption for a full house during the past year has been 100 lbs. per month. The last four barrels of butter which were dug out just before I left, is reduced to one barrel. Leffingwell informs me that Capt. Bernard has kept open house for the natives. He is evidently irresponsible so far as the use of stores be concerned, and Mr. Jenness, being inexperienced, of course could not be expected to keep control of him.

252.

Collinson Point, Alaska.

May 26. (Tues.)

Wind.
NE light.
NE, air.

Max. Min.
+38 +35
+40. +32

Clear. Warm. Snow melting very fast. Busy all day getting things ready to send Mr Jenness to Barter Island for Ethnological work and Mr. Sweeney to "Belvedere" and to clear up the "Ice Camp" at Martin Point.

Engaged Aigatuk and wife, Tuklumanna to stay with Mr. Jenness and help him with ethnological and archaeological work, with whaleboat, etc, until the "Alaska" can pick him up in July, approximately two months from date, for a lump sum of One hundred Dollars ($100.00). Also I-pau'-na (Tuklumanna's son, Aigatuk's half-breed stepson ca 7 years old) for $50.00 for the same time; or $25.00 per month. They started East in the evening, taking little from here besides Mr. Jenness' personal outfit, etc, to get the remainder of food supplies, tents, etc, at the Martin Point cache.

Wrote Capt. Cottle re. Stein's bill against Harkerson. Stein had given

May 26. (Tues.) Cottle ~~an~~ written order for Stuckeson to pay $300.00 to Cottle (date May 4th) to cover Stein's debt to Cottle. Made out draft for $300.00 to Stein, and send it to Cottle which he can collect on Stein's indorsement.

Also wrote Capt Cottle asking him to let Mr. Dan Sweeney sign free from S.S. Belvedere to join the Expedition. Sweeney agreed to sign on for $65.00 per month, as mate and general utility man. He is an expert sailor, both on whaling ships and small coasting vessels, has had some fifteen years experience on the Alaskan and Canadian Arctic coasts, and is a very efficient traveller and dog-driver. He has done very careful, conscientious work, looking after the Martin Point camp and attending to the Mackenzie Delta Survey freighting, using forethought in his operations.

Collinson Point, Alaska.

May 26. (Tues.)

Sweeney started from Collinson Point about 8:00 pm. for the Belvedere, accompanied by Tuklumanna's second boy, Kai-yū-tak ("Johnny") who has been helping here for a month or two, and in regard to whom I asked Mr. Jeness to try to send back to help me prepare specimens this spring. I have so much detail work that I have not much time for skinning specimens, and I have found that an Eskimo boy will do such work much more willingly than a man. The men all have certain cut-and-dried methods of skinning animals, and consider it almost a violation of taboo to skin an animal in any other than the traditional way, even for scientific specimens.

Sent two scalpels to W. Sprague Brooks at Demarcation Point to replace two which I broke for him; also two balls saleratus and two bars soap to Chas. Boyle, Chief Mate of Belvedere

Collinson Point, Alaska.

May 26. (Tues.)

Auktellik, an old Eskimo, had been waiting here some time for me to come back as he wanted medicine and other things. Bought from him six heavy bull Caribou skins, suitable for making winter boot soles. We have had no hides heavy enough for boot-soles the past winter and have had to use Ugjuk (Bearded Seal) skin. Paid him Shot 10 lbs. $2.00

Powder (black) 5 lbs. 2.00

Primers 250 @. 1.00

Hard Bread 1 box, 45 lbs 3.00

Tea, 15 cups ca. 5 lbs 2.50

Sugar. 5 lbs. 1.00

Flour, 1 sack 4.00

Baking Powder, 1 can .50

2 Reindeer skins. 8.00

$26.00

Estimated at about local ships' prices

Collinson Point, Alaska.

May 27. (Wed.)

Cloudy. Slight fog

Went out to Schr. Alaska. Considerable water on ice, and had to wade half knee deep in places. Stern hole open about ten feet across, and water 3 – 4 feet deep along sides on top of ice. Two or three days ago the ice East of her broke and water flowed around the point, surrounding the schooner, but the stern hole of Alaska made an exit hole and the water mostly ran down, forming a great sucking whirlpool for a time. The great rush of water around the schooner's sides helped a great deal to melt the ice away. Iron wood sheathing has been put on sides for about half way aft, over tarpaper, and fastened with brass screws. A crow's nest has been rigged, and ladders on main and fore masts. Nahmens, Mrs. Sullivan and Kopat have been pretty steadily at work on schooner, and Mr. Blue

Wind
Calm.
S. W. airs.
Wet Snow

Max. Min.
+34 +33.
+38 +32.

May 27 (Wed.) and Don. Addison working on the engines which have been taken apart and cleaned. A storm in the afternoon has melted ice around the propeller shaft so that it was turned over yesterday. Capt. Nahmens says that the hull of the Alaska is better than she was supposed to be last summer, although she is not sheathed with galvanized iron sheets clear to the keel. Where the bottom has scraped ice or rocks it is pretty deeply ploughed and slivered. No leaks apparently. Mr. Blue thinks the engines will run without a hitch.

Pd. Hagin'nak (for labor on "Alaska":
1 sack flour 50 lbs. 1 can Bak. Powder.
1 can lard, 10 lbs.
.44 cartridges 5 boxes (250 cartridges)
.44 cartridge primers #1, 500.
#2 primers (Shotgun) 250.
½ lb. Morris Mixture tobacco.
6 pkg. Chewing gum.

Collinson Point, Alaska.

May 27. (Wed.)

Set up two Green "Silvi" tents - one for clothing, skins, etc., and the other for my workshop and office. The house is too crowded and noisy and it is rather dark, especially at night. Zoological specimens have been accumulating since April, but I have so much routine Expedition which must be attended to, and so many interruptions from natives and others to which I must give personal attention that I can get little prepared in the way of scientific specimens.

Collinson Point, Alaska.

May 28. (Wed.)

Cloudy day. Wind west in the morning. Shifted to NE in afternoon

Time of natives (work).

Wind.

E 8 stg.

E 15 "

Kopak (on Alaska) 17 days.

Pikalo (on Mary Sachs), 5 hrs.

Alfred (" " ") 9 hrs.

Kunagnanna (" " ") 33 hrs.

Tauchiak 6 hrs. pd.

Max. Min.

+38. +34

+35. +32

Pd. Kopak. 17 das. @ $2.00 per day. Steady work as carpenter, etc. $34.00 due.

Hard Head 1 box.	$5.00
Tea. 15 Cups. Ca 5 lbs.	2.50
Prunes 2 boxes.	2.00
Sugar 5 lb.	1.00
Lard. 10 lbs	2.00
Tobacco 1 lb.	1.00
Prunes 10 lbs.	2.00
Chewing gum 1 box	1.00
	$16.50. Pd.
Cash to balance	17.50
	$34.00

Kunagnanna. 1 sack flour
1 " Hard
Chewing Gum

Collinson Point, Alaska.

May 28. (Thurs.)

Lesser Snow Goose – Flock of 15–20 flying west.

Pomarine Jaegers – Boys shot two (light phase)

Short-eared Owl – Fred shot one.

*/86. ♀. Asio accipitrinus – Two shot.

Willow Ptarmigan – about 18 shot, mostly males. Heads ♂'s dark rufous, and backs much mottled. Females pretty dark.

Rock Ptarmigan – about six males killed. All very red and bedraggled.

Traded one single barrel shotgun to Iglungishuk, Lefferwell's "Friday" for a double barrel gun, which is more suitable for collecting purposes, giving to balance value 75 brass shells, and reloading tools, 10 lbs shot, 250 primers, and 250 paper shells.

May 29. (Fri.)

Wind.
E 17 Sty
E 18 "

Max. Min.
+35. +30
+35. +32

12 to 18 inches of water on the bay ice.

Cloudy a. m. Clear p. m. Strong East wind.

Kiasick brought in one Seal from Kowenevik. Bought same for one sack flour, 1 can Baking Powder. Also two Cenbove skins for 2 12-lb. sacks shot and 1½ lbs. black powder.

Mupterek tried to sell me an old stone hammer. Said it belonged to his mother Osissina; made by the latter's father when she was a little girl, from Noatak River, back of Kotzebue Sound. Said he wanted shot for it. Offered him a 12-lb. sack and he was inclined to take it, but Keasek butted in saying it was not enough, and asked for more, which I refused to give.

Snow Buntings - singing very much, perched on top of tents, posts, or anywhere.

Rock Ptarmigan - a male in white shot which has a few slight brown streaks on head.

Black Brant - many flying to westward. A flock of about twenty flew over my

Collinson Point, Alaska.

May 29. (Fri.)

tent and I dropped two mallards with 16-gauge, no. 6 shot

Gave Omiyak, Kopak's wife one large enamel platter for putting ugruk soles on a pair of deerleg water boots. Jennie Thompson, a home Eskimo, says that she cannot sew this kind of boot.

Collinson Point, Alaska.

May 30. (Sat.

Wind.
E 12 city.
E 20 "

Max. Min.
+32. +28.
+34. +28.

Clear. Cold. +27° F. Strong East wind. Slightly cloudy at noon.

Short-eared Owl - Mullendurk brought me a ♂ specimen which he had just shot near camp.

#181. ♂ Asio accipitrinus.

Skinned another Short-eared Owl killed by Fred. and a Snowy Owl shot here some time ago.

#178. ♂ Nyctea nyctea.

Skinned also several other specimens which have been accumulating.

Weather is getting cooler; surface of water on ice (fresh water) is freezing again.

Collinson Point, Alaska.

May 31. (Sun).

Wind.
E 4 ofy.
E light airs.

Max. Min.
+28. +28.
+35. +32.

Colder weather again. Much water running on ice.

Cloudy in morning. Slight mist. Strong, raw east wind.

Capt. Bernard and Chas. Thompson went to Kongenavik, about ten miles west and returned in the evening. They reported much water on the ice, in some places up to the bottom of the sled. Thompson brought his wife Jennie back. She had been staying with the Eskimos for about a week. The woman has been working hard and steadily all winter, making clothing and repairing for all hands, and at times got pretty lonesome, as very few Eskimos came here during the winter.

Seals - The people at Kongenavik have not killed any Seals the past few days as they do not like to go out to the edge of the floe while such a strong wind is blowing.

Black Brant - The Eskimos at Kongenavik are killing a good many

May 31. (Sat.) Brant these days. Most of the flocks fly across the neck of the peninsula, over the winter portage. Bernard says he saw "millions" of Brand flying East while on his way home. Many flocks seen in afternoon today, most of them going about ¼ to ½ a mile off shore. Saw a large flock on tundra flats in the morning, but flew away before I got within three hundred yards. Several flocks going East between 7:00 and 8:00 a.m. Another favorite flying route is following the line of hills south of Sch. "Alaska" and passing point just east of mouth of Nearsh Creek (near Norani's Grave).

Pectoral Sandpipers — Saw the first of the season today here, although they had been noted several days ago.

Lapland Longspurs — both sexes numerous on tundra flats.

Sanderling (Calidris arenaria). Reported seen by Johansen.

Collinson Point, Alaska.

May 31. (Sun.)

Red Phalaropes – first of season seen by F. Johansen

Semipalmated Sandpipers – numerous. Three shot by F. Johansen.

Ereunetes pusillus

" "

Baird's Sandpipers – Common. Two shot by F. Johansen.

Actodromas bairdi

" "

Ruddy Turnstone – One seen by F. Johansen in morning. Fred shot one in the afternoon.

Arenaria morinella

Rock Ptarmigan – Fred shot a ♂, tip of head only, slightly stuffed with brown. Combs very large, projecting slightly above top of head.

Lemming – F. Johansen caught a large red Lemming, by chasing it through a runway in the grass.

* 174. ♂ Lemmus sp. 149-21-20.

May 31. (Sun.)

Lemming Mouse – F. Johansen caught a small reddish brown Lemming Mouse while botanizing on the tundra.

#175.♂ 95-8-16.

Pectoral Sandpiper – Louis Pechette shot one specimen today.

#194.♂ Pisobia maculata.

Pomarine Jaegers – numbers seen, hawking about over the tundra.

Johansen: continued:) from p 271

of Herschel Island. Camped about a mile west (April 16th).

April 17th - went to Martin Anderson's "North Star."

April 18th. Came to Duffy's place. Lay over 19th on account of Crawford's Snowblindness.

April 20th. Went to Belvedere.

April 21st Went to Martin Point

April 22nd " " Crawford's House

April 23rd. Reached Collinson Point 5:30 p.m.

Johansen: (Continued) from p. 272.

April 13th. Soon came to screw ice belt, loose cakes, soft snow between. Kept head towards Kamakak. Kept on zig zag course around rough ice. 12 m: Sounding 19 fathoms. Started 3:4 p. same kind of ice for worst ice seen. Apparently impassable, old and new ridge mixed up together; mountainous, very high. Some walls and smooth by screw ice "belt" — one about 50 ft. high. Saw an open channel N.W. & S.W. Bad ice in every direction. Cut passage a little way with screw ice and camped. Made about 4 mile. Biggest ridge estimated about 50 ft high. Biggest cakes about 10 ft high, but piled up on top of each other forming a ridge about 50 ft high at least. April 14th. Cut way. By noon made path to lane which was open yesterday; froze across today. Struck favorable place; ice rougher to East and west. Crossed ridge to South but got only a few yards and had to Cont. turn clopping way through.

Johansen: (Continued) from p 270.

At 7:30 p.m. Camped in midst of rough ice. Cooked & gave out. Primus broke down, then used seal blubber. Made about 1 mile today.

April 6th. Crawford and Johansen went ahead and picked out trail. Then cut trail ahead from tent; very slow work. Relayed with two picks. Started out 3:00 p.m. and took sledges one at a time with three men. At 4:00 p.m. came to smooth ice - for 1 hour's travel. Then a little rough ice (no chopping). 6.30 camped in low, rough ice. Made about 3 miles.

April 16th. Started 8:00 a.m. Good going to 1 p.m. 2 p.m. Started (some rough ice). Crossed big frozen over lane. On other side met perpendicular wall (same as met before). Screw ice; with snow between. Crawford found a fair trail by making detour. Coasted ice shore-bluffs from ridge. Had to cut only about 100 yds. through heavy ice. Passed through some rough ice. Then came smooth ice, and met Parsons (R.N.W.M.P. with Eskimos going to Hlisadel Island. Reached shore 5:30 p.m. - 32 miles West

to p. 268

Johnsen: (Continued) from p. 273

April 10th. Started 10:00 a.m. Sounding 30 fathoms. Kept S. on good ice. Saw companions "water ice" to E. Passed "screw ice" belt. Camped 7:00 p.m. on smooth ice. Weather getting colder. At 4:00 p.m. -3° F. After that continued cold weather until we got ashore; no trouble on account of wind. Made about 6 miles April 10th.

April 11th. Started 10:00 a.m. Good ice. Sounded 30 fathoms (1 hr. after starting). Old ice with much snow. Then came to immense pressure ridge belt (boiled), screwed up; later some with ice dirty, especially near bottom, probably from sea bottom. No land seen; hazy. Traveled about 12 miles. -1/6 F. at 7:30 p.m.

April 12th -7° at 10:00 a.m. Saw mountains SE. Started 11:00 a.m. Kept S. (a little to W.) all day in rough dirty ice. Occasional strips of old smooth ice; snow covered. At 5:00 p.m. reached immense broad pressure belt extending to land as far as we could see. Sounding 17 fathoms. Air -9° at 7:00 p.m.

Johansen. (Continued). from p 272

32 fathoms and 35 fathoms. Last two
Jars 62 fathoms and 70 fathoms. All
taken within about one mile. Hilly
bottom steep from 35 to 70 fathoms. Crossed end
of lead to SW. Camped on smooth floe with thin
ice around. Made about one mile that day.
Kept watch all night on account of cracking
and moving ice. Screw ice wall behind us
was taken away during night. 0.7 mile

April 9th. Crossed (one available shot) in neck of
time. Drifted SW during night. By 11 o'clock
was over the worst, and found pretty good
going, fairly smooth ice, some cracks.
3:45 pm. Found broad open water, could not
see across. Found old tracks of way out.
Broad lead and kept westerly.
Kept along lead on new ice to SE. Found
narrow channel (lead divided) 10 yards
across. While waiting lead closed up, and
we got across. Kept on to SE. SW gale, and
weather colder). Found old cattle and
hummocks, and camped 6:00 pm. Cleared
in evening. Storm at night. Cleared again
in forenoon. Made about 5 miles April 9th
7 p. 27m

Johansen (continued from page 166.

30th. Shortleson Observation 140° 50' 30" W
69° 58' 47". On 31st, difficult going over thin ice; and had to lighten sleds and carry stuff over. Sounding 25 fathoms at evening camp. April 1st. Open water all around us except to North. Estimated 12 miles travelled that day. April 2nd. Good travelling; open water and pressure ridges: filled cracks with ice blocks. About an hour to cut road 100 yds at one place, 20 fathoms. Crossed one crack with large ice etc. Pt Barrow sleds frequently broke down. Frequent stops to repair sleds, take observations, etc. 70° 3' N. 138° 57' W (April 2nd) April 3rd, mild weather, SW wind, raining snow, walking under foot. Later colder, better going. 30 fathoms evening. At 25th in morning 2° at 8 pm. Apr 4th. Little travel; came to open water. Shot 4 Seals. Polar Bear came to camp, and was killed. During night open water widened, especially to South.

70° 13' 11" 140° 50' 22" (from Obsn.)

Traveled NW. and N. Very warm with westerly wind April 5th. Travelled from 10:20 a.m. to 3:30 p.m. Continually formed open water. Pitched Separation Camp April 5th 3:30 p.m. Divided outfit. McDonnell shot a seal. Weather same. Wind shifted to East last day warm (April 6th) Sounding 185 fathoms Storkerson loaded Sleds. Stefansson wrote letters. April 7th Sounding 175 fathoms Separated at 4:30 p.m. Stefansson made beacon on ice lake to assist in taking soundings away south. But they did not have enough line (125 fathoms) to get bottom. Travelled and followed open lead to S and W. Reached smooth ice for long stretch. Made about 3 miles that day. Hazy weather and snow so that they could not see beacon. Two guns taken back by support party for return. April 8th. Thick weather, but kept south; soon came to "screw ice" belt. Took sounding at noon - 33 fathoms - had passed Continental Shelf. Took 3 soundings along lead to NE. 1st 35 fathoms. 2nd. About 100 feet

P. Page 277

No.	Sex.	Species.	Locality	Date
187.	♂	Lagopus l. lagopus	Satirochit River Alaska	Apr. 20-30
188.	♂	" " "	" " "	" "
189.	♂	" " "	" " "	" "
190.	♀	Ereunetes pusillus	Collinson Point, Alaska.	May 31
191.	♀	" "	" " "	" "
192.	♂	Actodromas bairdi.	" " "	" "
193.	♂	" "	" " "	" "
194.	♂	Pisobia maculata	" " "	" "
195.	♂	Arenaria morinella.	" " "	" "

No.	Sex.	Species	Locality.	Date

No.	Sex.	Species.	Locality.	Date
				1914.
147.		Ovibos moschatus (Skull)	E. of Collinson Point, Alaska.	Feb 3. 1914.
148.	♀	Vulpes lagopus innuitus	Collinson Point. Alaska.	" 5. "
149.	♂	Lepus americanus [macfarlani	West Branch Mackenzie Dela.	Jan. 28. 1914.
150.	♂	" " "	" " " "	" " "
151.	♂	" " " (skull)	" " " "	" " "
152.	♂	Microtus sp.	Collinson Point, Alaska.	March 1. "
153.	♂	Lemmus sp.	" " "	" " "
154.	♂	Lagopus r. rupestris.	Hula-hula River. Alaska.	April 2. " Destr.
155.	♂	" l. lagopus	" " "	" 6. "
156.	♂	" " "	" " "	" 16 "
157.	♂	" " "	" " "	" " "
158.	♂	" " "	" " "	" " "
159.	♂	" " "	" " "	" " "
160.	♂	" " "	" " "	" 17. "
161.	♂	" " "	" " "	" " "
162.	♂	" " "	" " "	" " "
163.	♂	" " "	" " "	" " "
164.	♂	" " "	" "	" (spoiled)

No.	Sex	Species.	Locality.	Date.
165.	♀	Perisoreus canadensis [fumifrons.]	Hula-hula River, Alaska.	Apr. 16, 1914
166.	♀	Vulpes lagopus innuitus.	835-318-138. D.W. Blue. Collinson Point, Alaska.	Jan. 27, "
167.	♂	Putorius sp	350-92-51 Salirochit River, "	Apr. 30, 1914
168.	♂	Lagopus l. lagopus	" " "	Apr. 20-30/14
169.	♀	" " "	" " "	" " "
170.	♂	" " "	" " "	" " "
171.	♂	" " "	" " "	" " "
172.	♂	" " "	" " "	" " "
173.	♀	Putorius sp.	282-73-41. Kamarkak, Y.T., Canada.	May 18, 1914
174.	♂	Lemmus sp	149-21-28 Collinson Point, Alaska.	May 31, "
175.	♂	[Lemming Mouse]	795-8-16 " " "	" " "
176.	?	Dicrostonyx sp.	[D.J.] Barter Island, Alaska.	" 29, "
177.	♀	Nyctea nyctea	Humphrey Point, Alaska.	" 23, "
178.	♂	" "	Collinson Point, "	" "
179.	♂	" "	" " "	June 1, 1914
180.	♀	Asio accipitrinus	" " "	May 28, "
181.	♂	" "	" " "	" 30, "
182.	?	" "	[D.J.] Barter Island, Alaska	" 29, "
183.	♂	Acanthis	Collinson Point, Alaska	June 1, "
184.	♀	"	" " "	" " "
185.	♂	Lagopus r. rupestris.	" " "	" " "
186.	♂	" " "	" " "	" " "

No.	Sex	Species.	Locality.	Date
187.	♂	Lagopus L. lagopus.	Satirochit L. R. Alaska	Apr. 26,
188.	♂	" " "	" " "	" "
189.	♂	" " "	" " "	" "
190.	♀	Ereunetes pusillus	Collinson Point, "	May 31.
191.	♀	" "	" " "	" "
192.	♂	Actodromas bairdi.	" " "	" "
193.	♂	" "	" " "	" "
194.	♂	Pisobia maculata	" " "	" "
195.	♂	Arenaria morinella.	" " "	" "
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